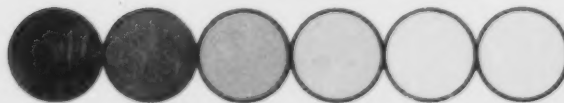


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16. Abstracts The results of an emission inventory of the state of New Mexico are reported. The emissions within each of the states' eight Air Quality Control Regions are summarized by source type. The approach used in the inventory is to determine the consumption of fuels according to combustion sources for power, space heating, and other industrial commercial process needs. The emissions from these sources were estimated by the use of appropriate emission factors applied to the fuel and/or process involved. The inventory is restricted to five major primary pollutants; particulates, sulfur dioxide, carbon monoxide, hydrocarbons, and oxides of nitrogen. There are five source categories in the inventory: stationary source fuel combustion, industrial process losses, solid waste disposal, transportation, and miscellaneous sources.					
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Emission		Fuels			
Inventories		Combustion products			
Sources		Industrial wastes			
Particles		Waste disposal			
Sulfur dioxide		Transportation			
Carbon monoxide		Fuel consumption			
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SUMMARY REPORT ON
AIR POLLUTION EMISSION INVENTORY
FOR THE STATE OF
NEW MEXICO

Prepared for

New Mexico Department of Health and Social Services
and

Environmental Protection Agency
Air Pollution Control Office
Raleigh, North Carolina

August, 1971

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INTRODUCTION

The Clean Air Act requires that each State submit to the Environmental Protection Agency a plan providing for the implementation, maintenance, and enforcement of the national ambient air quality standards within each air quality control region. To enable the State to formulate such a plan, an inventory is required of emissions and sources of emissions within each region.

The inventory is restricted to the five major primary pollutants: particulates, sulfur dioxide, carbon monoxide, hydrocarbons, and oxides of nitrogen. There are five source categories in the inventory: stationary source fuel combustion, industrial process losses, solid waste disposal, transportation, and miscellaneous sources.

Sources were considered to be of two types; namely, point or area sources; a source being considered as a point source if its total emissions were more than ten tons per year, and as an area source if the emissions were less than ten tons per year, with the exception of those industries listed in Federal Register, Vol. 36, No. 67 (see Appendix C), which were included as point sources, regardless of size. Generally, all point source emissions data were obtained by contacting the individual company and area source data were obtained from information, published or otherwise, from government agencies and public utilities.

Questionnaires were mailed out to industries and institutional establishments collected from: the report "Manufacturing and Mining Directory of New Mexico 1970"¹, a list of industries compiled by the State of New Mexico Health and Social Services Department², local telephone directories³, and a list of priority industries compiled by the Federal Air Pollution Control Office.

A total of 755 questionnaires were sent out, of which 399 were completed, either by the companies themselves or by PRCC on a telephonic follow-up basis, making estimates where necessary. Of the remainder, some companies could not, or would not, release information (see Omissions Section), but the majority were considered to be of minor importance as point sources, since they all were small concerns, and emission data from like-sized companies indicated probable emissions below 10 tons per year. (Many of the non-responders were in the dry-cleaning category, since questionnaires were sent out to all dry cleaner shops in the State.)

The State has been divided into eight Air Quality Control Regions; each region represents a commonality of emissions sources and/or air masses. In order to achieve this goal, a number of the State's counties were split between Air Quality Control Regions (AQCR). In one case, that of Valencia, the county has been made part of three AQCRs.

Figure 1, Appendix "B", is an outline map of the State, showing the AQCRs, as well as the individual counties.

The numbering system on the map corresponds to that used in the emissions inventory. A three-digit number has been assigned to each AQCR in the Nation. The individual counties within an AQCR were assigned a one or two digit number. These correspond to the "jurisdictional" number in the emission inventory listings.

In addition, Bernalillo County, which includes Albuquerque, was gridded for more specific locating of emission sources.

This report presents the emissions within each of these regions, summarized by source type. A supplementary data report provides similar tabulations of the emissions by source type for the County of Bernalillo.

METHODOLOGY

The technique used to prepare the inventory is in conformance with the methods outlined in "Air Pollution Emission Factors"⁴ and "Air Pollution Emission Inventory Techniques" by Bierbaum and Gedgaudas.⁵ The basic plan of this approach is to determine the consumption of fuels according to combustion sources for power, space heating, and other industrial/commercial process needs. The emissions from these sources were estimated by the use of appropriate emission factors applied to the fuel and/or process involved. Reductions due to control devices were considered wherever applicable.

All pollutant emissions in an AQCR can be categorized as being from stationary sources or mobile (transportation) sources. Stationary sources include residential, commercial, institutional, industrial and power generation activities. Depending on size, these sources are treated as point or area sources, as previously described in the Introduction Section.

Solid waste refuse disposal is an entirely separate source of pollutants included in this inventory. Pollutants arise from incinerators, open burning dumps, and backyard burning. Appropriate factors, as previously described, are used.

In addition to combustion and solid waste sources, contaminants are emitted into the atmosphere, as part of some industrial processes. The losses are included in this inventory as part of the emissions when the applicable factors were available.

The following sections cover in more detail the techniques used in the course of inventorying the emissions for the State of New Mexico.

Grid Coordinate System

The County of Bernalillo, which includes the City of Albuquerque, being the largest metropolitan area in the State, was treated to more detail in the location of emission sources. The County was divided into a grid system, employing the Universal Transverse Mercator scheme. This gridding makes it possible to locate emissions of both point and area sources by grid squares, and thus lends itself to the use of computer processing applicable to the various diffusion models being developed for urban diffusion problems. A map of this grid system is shown as Figure 2, Appendix "B".

The grid network consists of a basic five kilometer (5 km) network. Within the central core of Albuquerque, the gridding is in 2.5 km squares. The outlying areas of low population are gridded into approximately 40 km squares.

The grid squares in Figure 2 were numbered, as shown. All emission data in the gridded area were identified as to location by this numbering system.

Fuel Consumption by Stationary Sources

A. Fuel Types

Residential

Fuel used by residential sources is used primarily for space heating during winter periods, and other domestic use all year for water heating and cooking. The major fuels used are distillate oil and natural gas, with lesser amounts of coal and other fuels.

Commercial/Institutional

Commercial users of fuel include business, semi-public and public facilities. For the most part, such usage is mainly for space heating, as in residential use. Public and private users include schools, universities, hospitals, cultural and religious centers, local, State and Federal offices.

Industrial

Fuel is used by industrial operators for both space heating and process needs. A multitude of process uses are included in this report, and the appropriate emission factors are employed.

Steam/Electric Utilities

Steam/Electric Utilities comprise the largest class of fossil fuel users in the State, and also provide the most accurate source of data. The usage of coal by the "Four Corners" power plants accounted for almost all the coal used in the State.

B. Apportionment Methods

Natural Gas

Natural gas usage was obtained from "Natural Gas Production and Consumption, 1969"⁶, by the Bureau of Mines, which gives the consumption by residential, commercial, and industrial users.

Residential Gas Apportioned by -

Region: by the number of households burning gas

Grid: by population

Commercial Gas Apportioned, after subtracting out the point source total, by -

Region: by total households

Grid: by population

Industrial Gas -

All industrial gas is accounted for in the point source total

Oil

Oil usage was obtained from "Sales of Fuel Oil and Kerosine, 1969"⁷, by the Bureau of Mines, which gives the sales of each type of oil. The principle user of each type is shown in Table I, which represents the selection made in dividing oil usage data into specific user categories for inventory purposes.

Residential Oil Apportioned by -

Region: by the number of households burning fuel oil

Grid: by population

Commercial Oil Apportioned, after subtracting out the point source total, by -

Region: by total households

Grid: by population

Industrial Oil Apportioned, after subtracting out the point source total, by -

Region: by total households

Grid: by population

TABLE I
ASSIGNMENT OF OIL TYPE TO USE CLASSIFICATION

<u>TYPE OF OIL</u>	<u>USE</u>
Residual	Industrial
<u>Distillate</u>	
Kerosine (heating)	Residential
Kerosine (other)	Industrial
No. 1	Residential
No. 2	Residential
Fuel Oil (industrial)	Industrial
Fuel Oil (oil companies)	Industrial
Military	Commercial
Utilities	Industrial
Diesel, Off-Highway	Industrial
Other Uses	Commercial

Coal

Coal usage for the State was obtained from "Bituminous Coal and Lignite Distribution, 1970"⁸, by the Bureau of Mines. The major users are the electricity generating utilities, which are point sources, and the remainder of the coal was assumed to be used for house heating. A balance of approximately 1100 tons/year was left after deducting the steam/electric uses. This small amount was apportioned by -

Region: by the number of households burning coal

Grid: outer grids only, on a population basis

Transportation Sources

A. Motor Vehicles

The New Mexico State Highway Department's report "New Mexico Traffic Survey"⁹, gives information on vehicle-miles of travel for each type of road, by county; from this an estimate of urban and rural traffic mileage was made. For purposes of estimation, rural traffic was assumed to move at 45 mph, urban at 25 mph.

For Albuquerque, the 45 mph and 25 mph vehicle-miles of travel was found for each grid from a map, "1970 Traffic Flow"¹⁰, prepared by the City of Albuquerque Traffic Engineering Division. Basically, the freeway portion of the Albuquerque traffic was assumed to move at 45 mph, the surface street traffic at 25 mph.

B. Diesel Vehicles

The amount of fuel consumed by diesel vehicles was obtained from "Sales of Fuel Oils and Kerosine, 1969"⁷, published by the Bureau of Mines.

Apportioned -

Region: by total vehicle-miles of travel

Grid: by 45 mph vehicle-miles of travel

C. Aircraft

The type and number of flights, both civil and military, were obtained from the Federal Aviation Administration for the larger airports. For commercial flights, additional information on the type of aircraft and the number of engines per aircraft was obtained from the airline flight guides. Approximate information on flights from Alamogordo Airport and Holloman AFB was obtained, but no information was obtained for Cannon AFB or the smaller airports.

Apportioned -

Region: by airport location

Grid: by airport location

D. Railroads

Fuel usage by railroads was obtained from "Sales of Fuel Oils and Kerosine, 1969"⁷, published by the Bureau of Mines.

Apportioned -

Region: by miles of track

Grid: by miles of track

Industrial Process Loss

The discharge of pollutants into the atmosphere from raw materials processing is a result of a large class of operations. Data obtained from questionnaires returned formed the only source of accurate data. Only a detailed knowledge of the operations and materials involved would have allowed a more realistic estimate of emissions.

Emissions were based on "Air Pollution Emission Factors",⁴ wherever possible, but, for any process not listed in the report, a 1% process loss was assumed. Control device effects were considered, based on information furnished on the questionnaires.

Gasoline and Solvent Evaporation

A. Gasoline Handling Losses

Losses in the handling of gasoline are attributable to storage evaporation and marketing losses. Appropriate emission factors were applied to gasoline sales data.

The number of gallons of gasoline sold per county was obtained from the New Mexico Bureau of Revenue, and emissions were based on the assumption that 75% of service stations use the submerged fill technique in Bernalillo County and 50% elsewhere in the State, these values being given by the Albuquerque Air Management Office.¹¹

Apportioned -

Region: by gallons of gasoline sold
Grid: by vehicle-miles of travel

B. Dry Cleaning

Solvent evaporation losses were considered to be principally from dry cleaning operations.

The State totals for solvent evaporation were derived from the returned dry cleaning questionnaires, increasing the reported totals by a factor equal to the ratio of the total number of cleaners in the State to the number of non-responding sources.

Liquified Petroleum Gas and Wood

Liquified petroleum gas and wood are fuels widely used in the more rural areas of New Mexico.

A. Liquified Petroleum Gas

Liquified Petroleum Gas (LPG) is used in internal combustion engines, for lighting, for industrial processes, and for residential activities.

Information for the Bureau of Mines¹² indicates that about 75% of all LPG sold in the State was for commercial and residential uses.

This amount was apportioned -

Region: by households burning LPG

Grid: by population

The remaining 25% was considered as being included in the various industrial point source totals.

B. Wood

Wood is used for space heating of homes in the forested parts of New Mexico. The usage of wood in households was obtained from census figures¹³.

Calculations of emissions from wood used as a fuel were made only for the residential source. The amount of wood burned per household was estimated on the basis of heat input required to heat a house. Figures of natural gas usage per household were available - 102.5 MCF gas/household unit. Assuming 1.08×10^6 BTU's per thousand cubic feet of gas, 100.7×10^6 BTU's are consumed per unit.

Assuming the average heating value for wood, and having the total number of housing units using wood available, the calculation of the amount of wood burned can readily be made.

Recourse to the suggested emission factors⁴ determine the emissions from the wood burning source.

Apportionment was made, for regions, by households burning wood; for the grid, by population (outer grids only; 5 km grids or smaller were considered to be within an urban area where no wood was used for fuel).

Open Burning

The Solid Waste Disposal Unit of New Mexico estimates that the average person in New Mexico generates 3.5 lbs/day of trash. Their report "Municipal Collection and Disposal Data, 1970"¹⁴, was up-dated using actual 1970 census data to give the amount of trash collected, and method of disposal. The open burning dumps were considered as point sources. The difference between the amount of waste generated and the amount collected was assumed to be disposed of by residential backyard burning.

On-site incineration from point sources was taken from the point source questionnaire data.

Apportioned -

Region: The amount open burned was calculated for each county.

Grid: The City of Albuquerque does not permit backyard burning, so those grids outside the city limits were allotted material for open burning.

Agricultural Burning

A report published by the New Mexico Department of Agriculture, "New Mexico Agricultural Statistics"¹⁵, gives information on the types and acreage of crops grown in the State. Of all crops, only barley and apples are associated with a field burning program. The waste factors were obtained from experimental data from the Deciduous Fruit Field Station, University of California, Santa Clara.

Factors -

Barley: 1 lb. of waste for each pound of yield, 10%
of which is burned.

Apples: 0.5 tons of waste burned per acre

Apportioned -

Region: Barley - by production

Apples - by acreage

Dust from Roads

A report "Air Pollution from Dusty Roads"¹⁶, by the New Mexico Air Quality Control Unit, gives an emission factor of 0.9335 lbs. of particulate below 6 microns per vehicle-mile of travel over an unpaved road.

The New Mexico State Highway Department publishes information on the different types of roads and their surfaces, by county, in "Road and Street Mileage in New Mexico"¹⁷ and, in another report, "New Mexico Traffic Survey"⁹, gives information, by county, on the vehicle-miles of travel over the different types of roads.

With the above information, it is, therefore, possible to estimate the emissions from unpaved roads for each county.

For the Bernalillo County grid, the assumption was made that the unpaved roads exist only in the outlying areas, represented by the outer grids. The apportionment of the County total vehicle-miles over unpaved roads was made by means of grid population density.

Miscellaneous Entries

A. Wood Waste Incineration

The emission factor for particulates was assumed to be 7 lbs. per ton of waste, corresponding to unsatisfactory operation of the burner.⁴ The allowable emissions, according to the New Mexico Air Quality Control Regulations, were evaluated assuming 500% excess air.

B. Households

The number of households per county and the type of fuel used in each, was obtained from 1960 census data¹⁸, and these values were up-dated to give 1970 data by multiplying by the percentage change in population.

C. Population

The population distribution was obtained from 1970 census information.¹³

Allowable Emissions

Allowable emissions based upon Federal¹⁹ and State regulations²⁰ were calculated for point sources wherever applicable. The results from calculations were entered into the point source data punch cards for computer processing.

Omissions

The following sources of air pollution were not considered, for the reasons given.

A. Area Sources

- 1) Blowing Dust - no reliable method of estimating emissions
- 2) Forest Fires - no reliable method of estimating how much is burned
- 3) Structural Fires - no reliable method of estimating how much is burned
- 4) Cannon AFB - would not release information
- 5) Small Airports - no records kept
- 6) Solvent Evaporation Losses due to Paint Application - no estimate made of volume of paint materials used

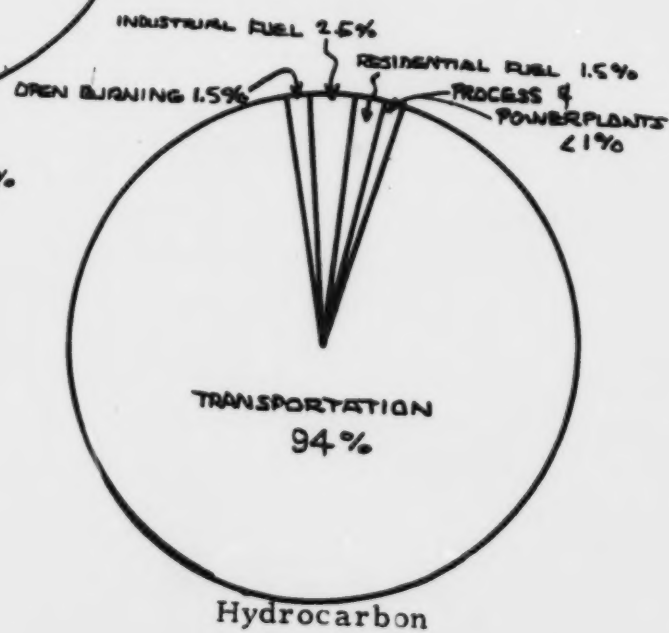
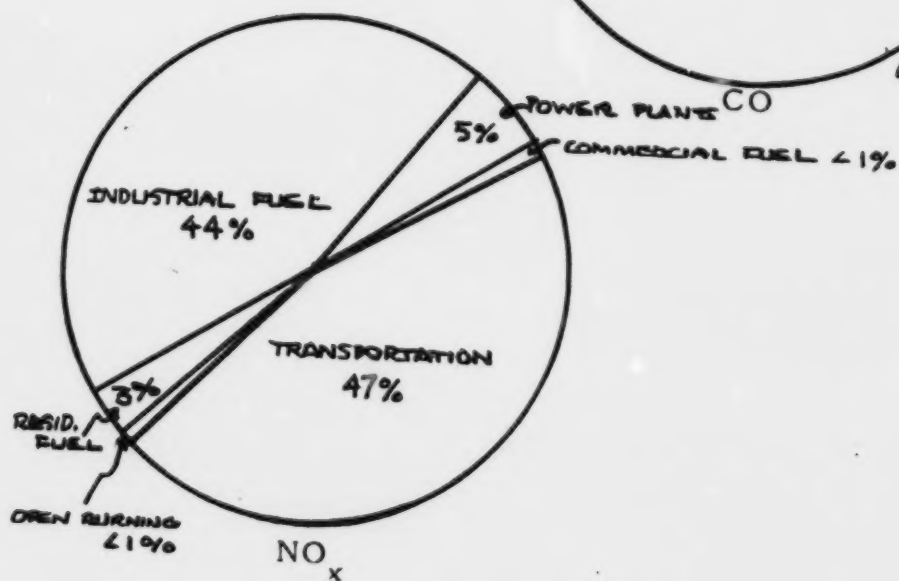
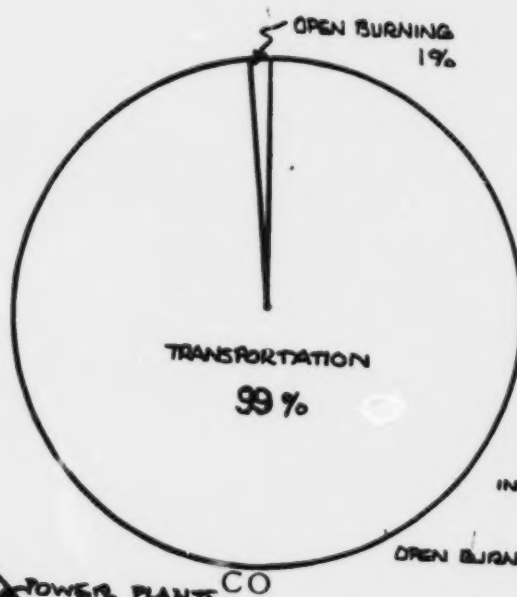
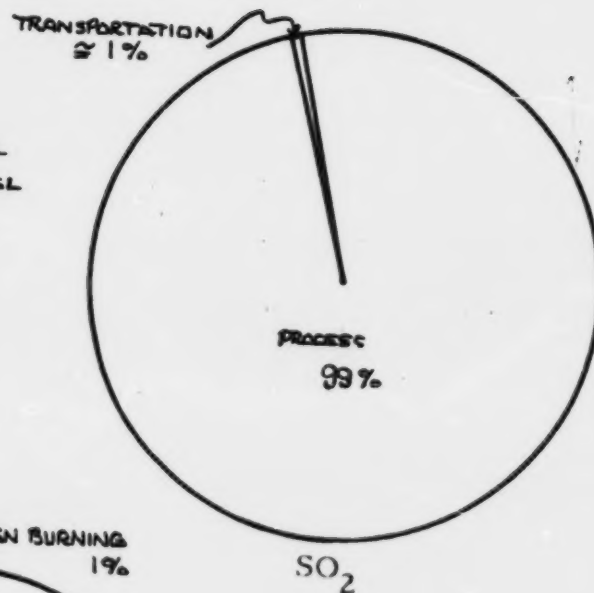
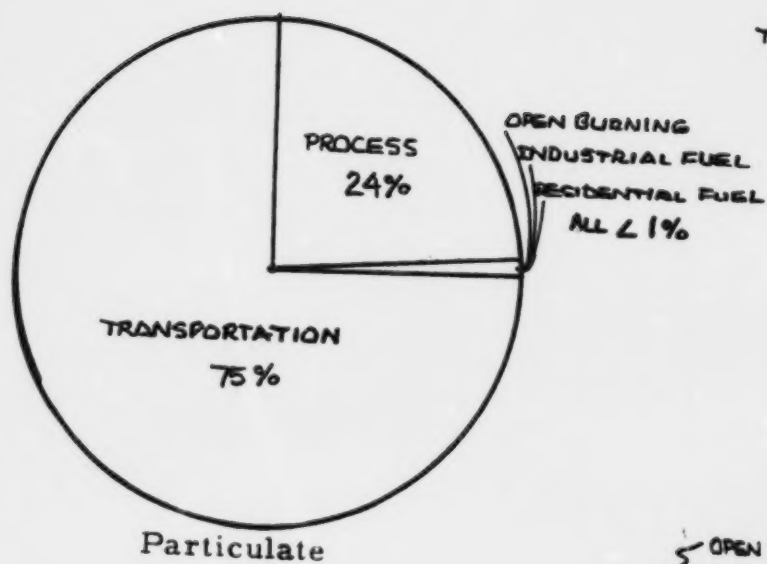
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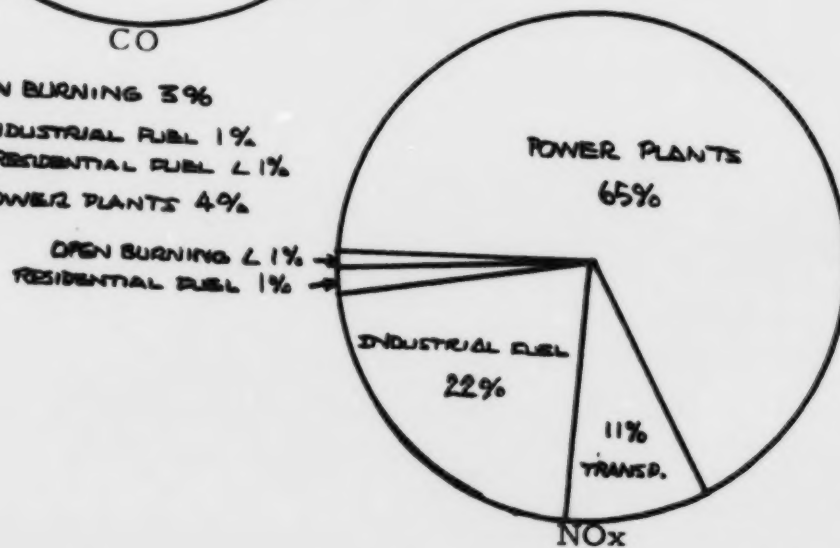
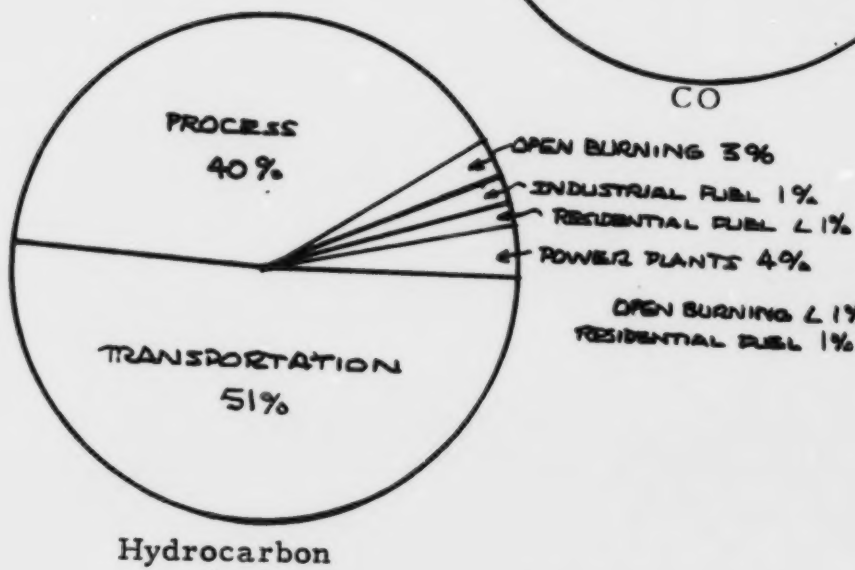
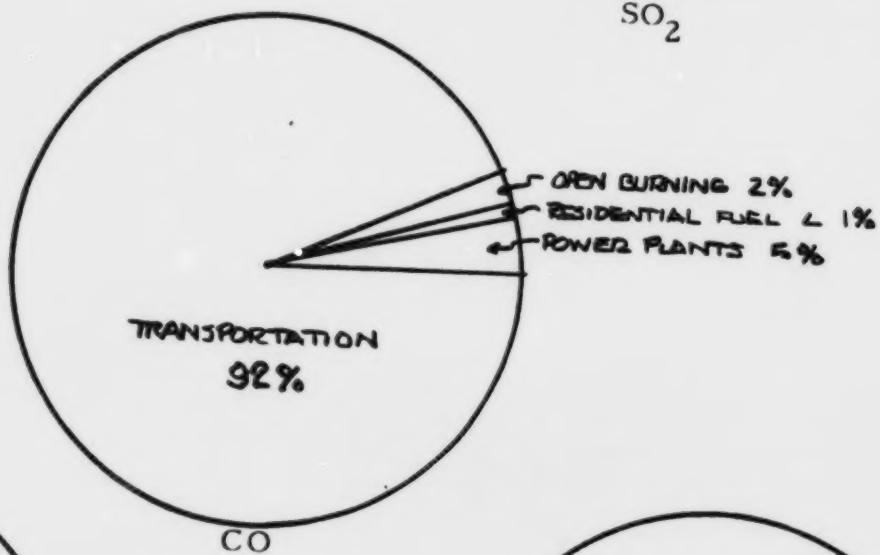
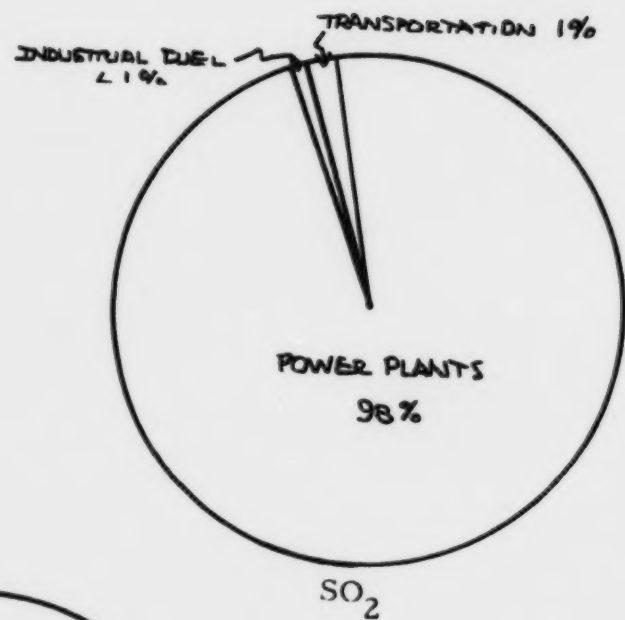
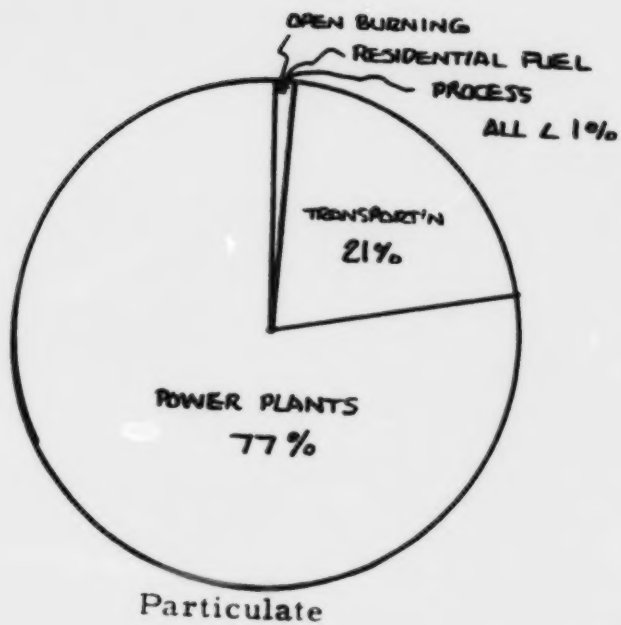
- 1) Albuquerque Gravel Products - only reported on operations at one of their four plants
- 2) Duke City Lumber - did not return questionnaire
- 3) Wylie Paving Company - could not supply information
- 4) Gasoline Distribution Centers - two companies did not have the information available and one company would not release the required information (Therefore, no losses due to gasoline in storage is included in this inventory)
- 5) Federal Installations - the information provided was insufficient to make an estimate of emissions

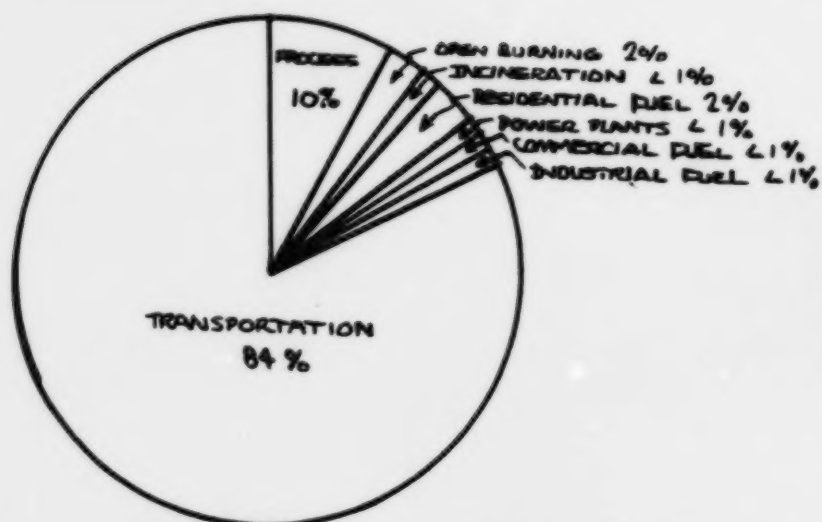
SUMMARY

A summary of the annual emissions shown as Pie Charts with appropriate percentages is part of this section of the report. All emission sources of less than one percent (1%) are so marked.

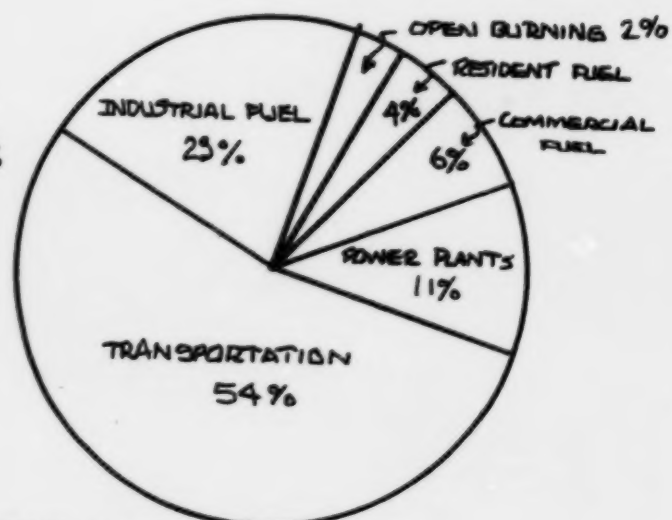
The corresponding summary sheets and tables are included in Appendix "C" of this Report.



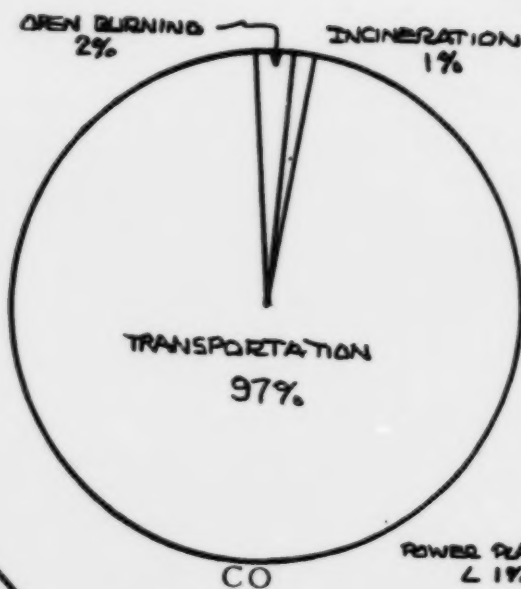




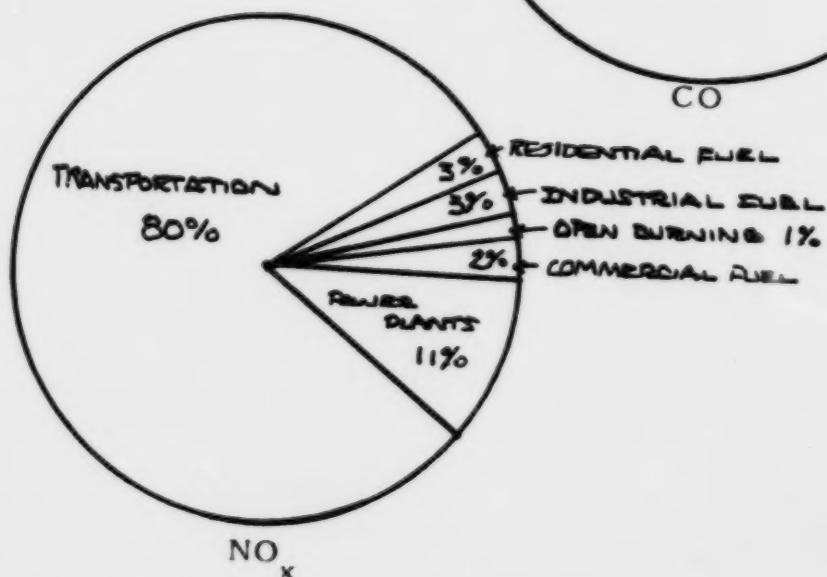
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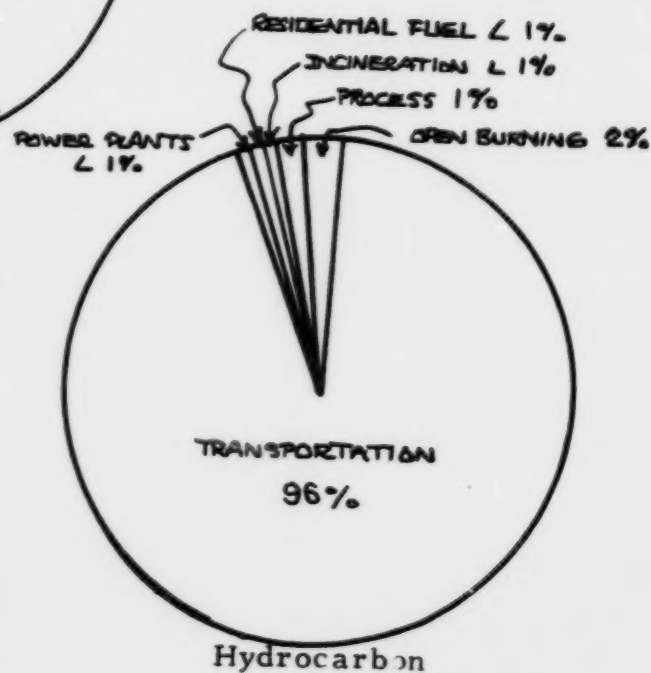
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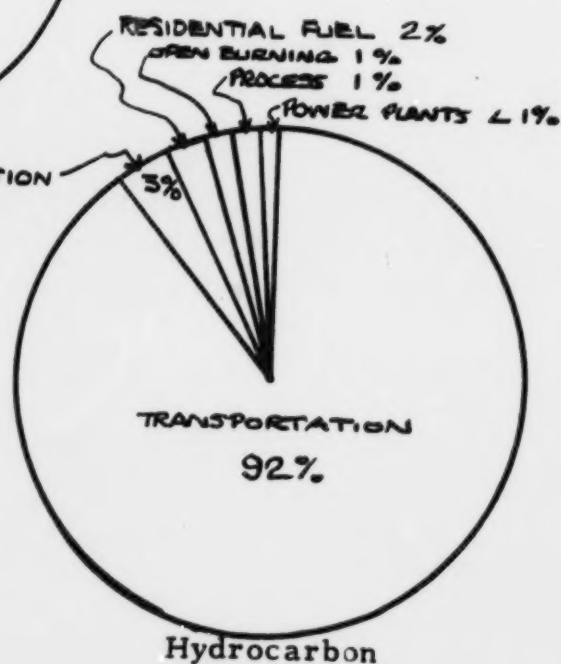
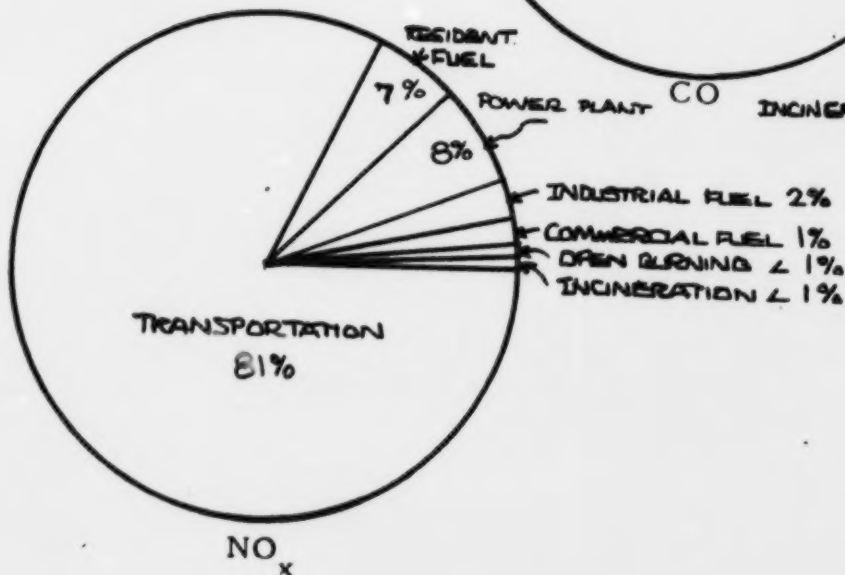
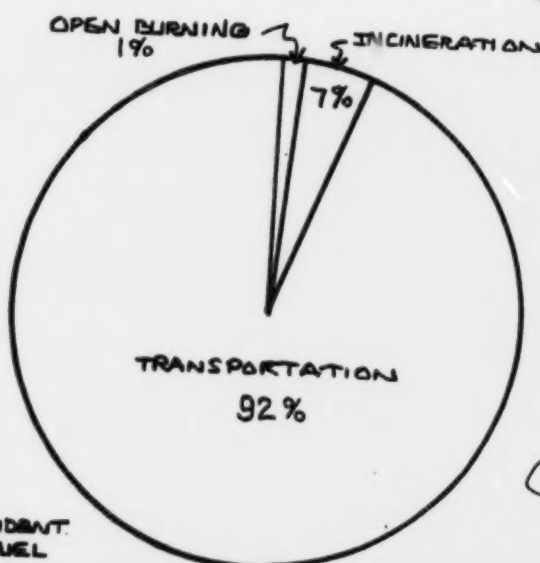
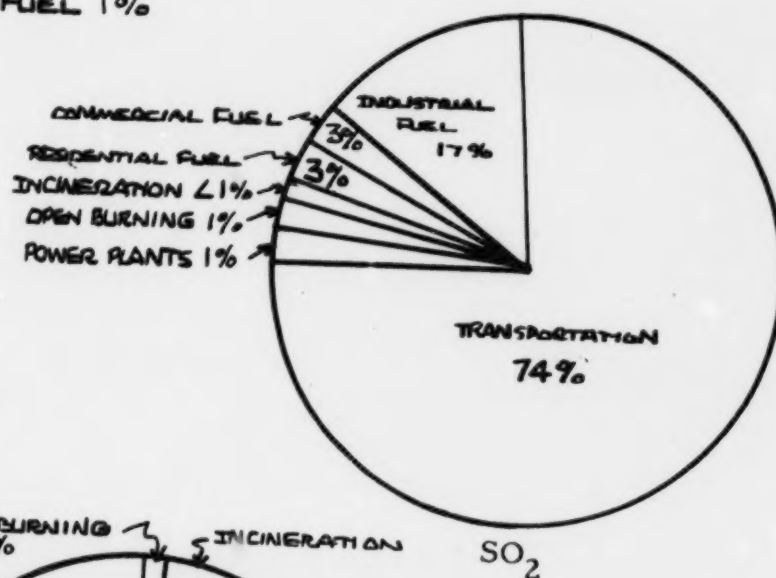
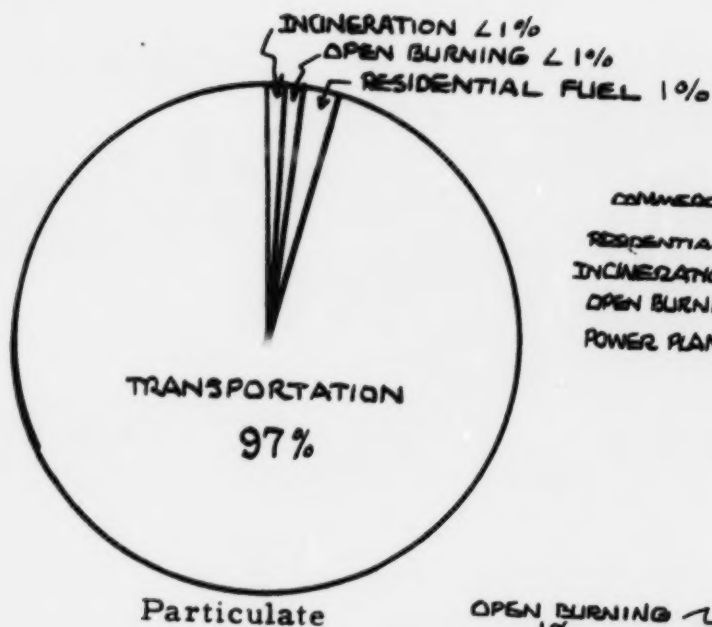
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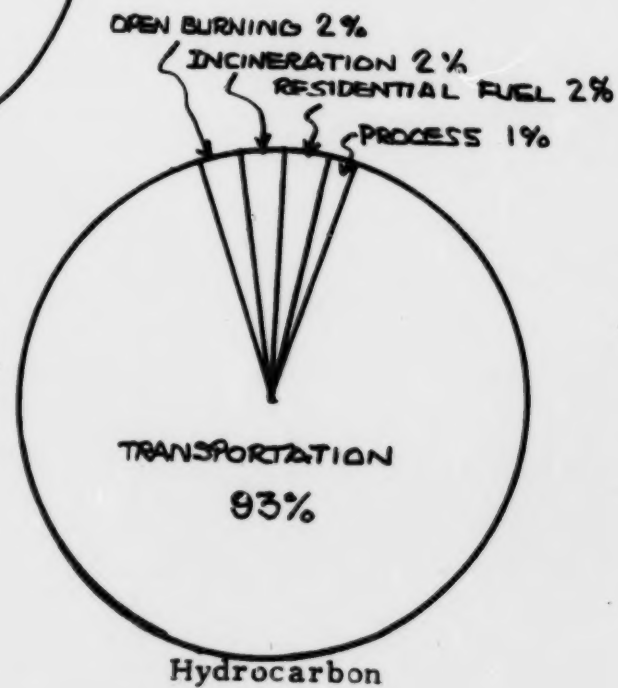
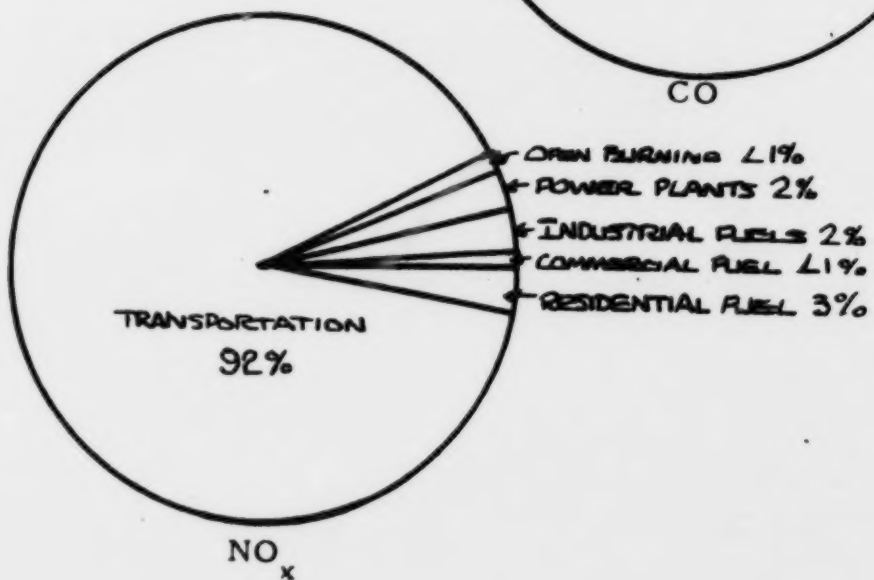
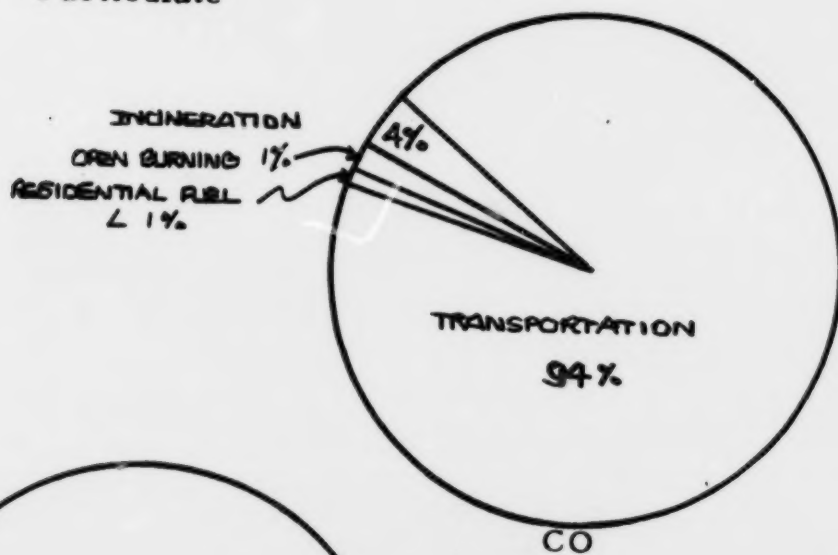
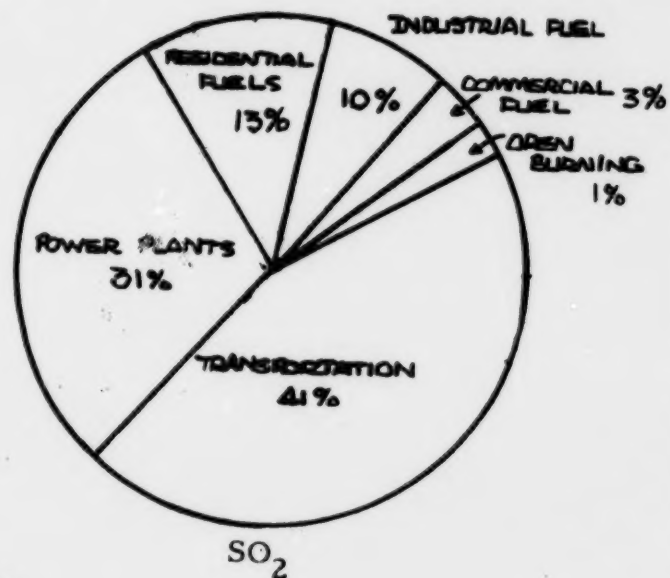
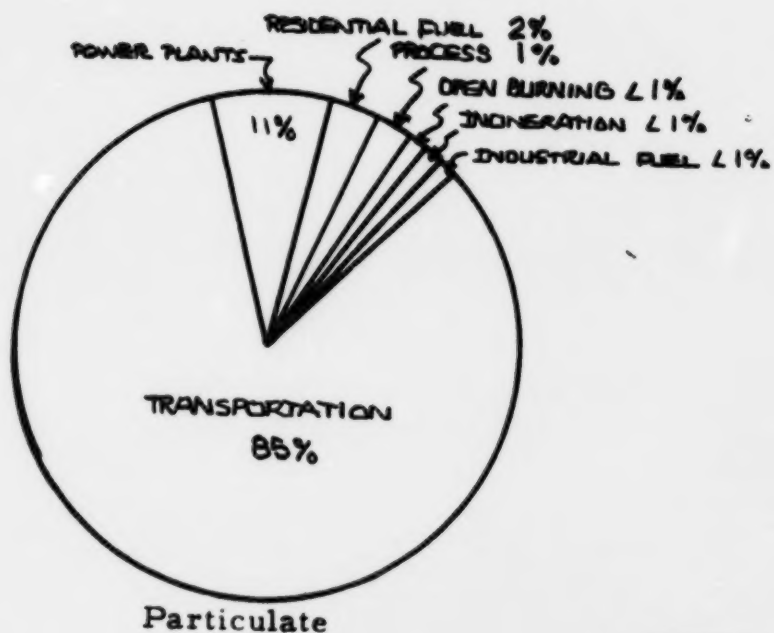


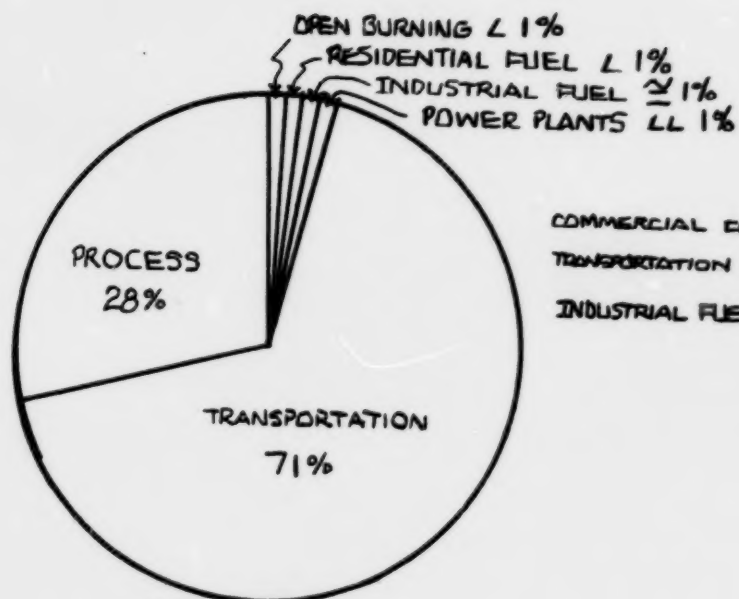
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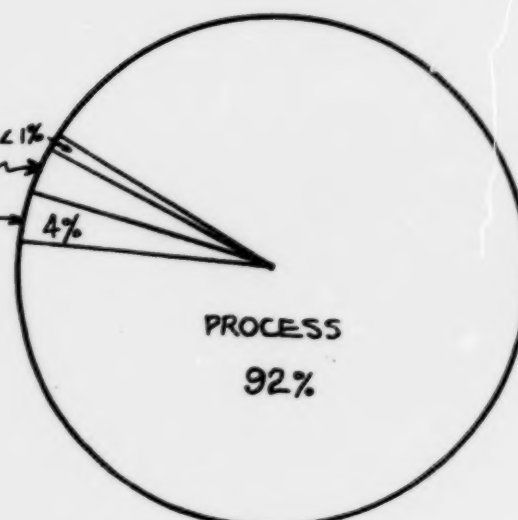
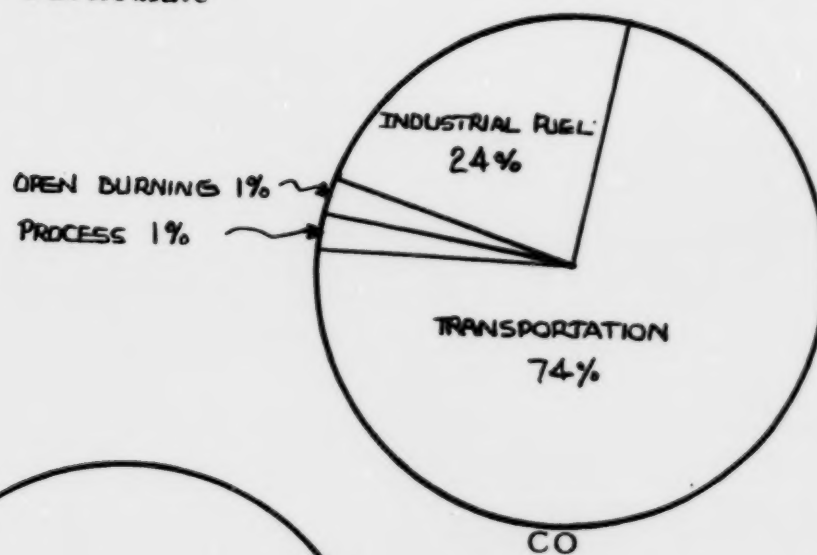




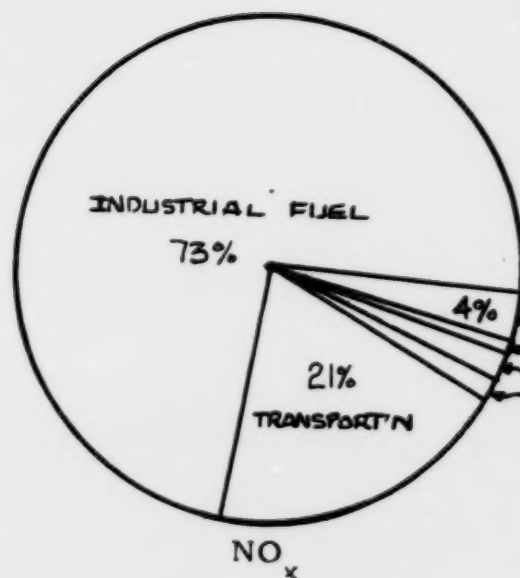


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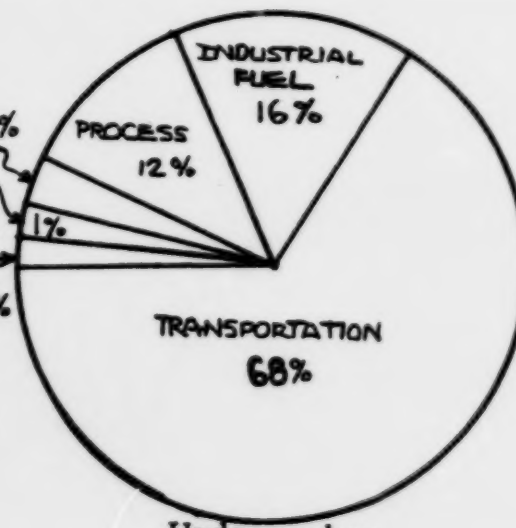
COMMERCIAL FUEL 221%
TRANSPORTATION 4%
INDUSTRIAL FUEL 4%

SO₂

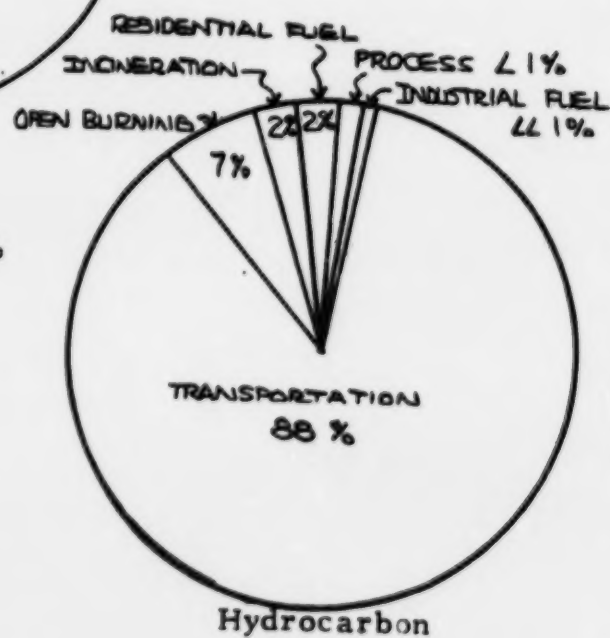
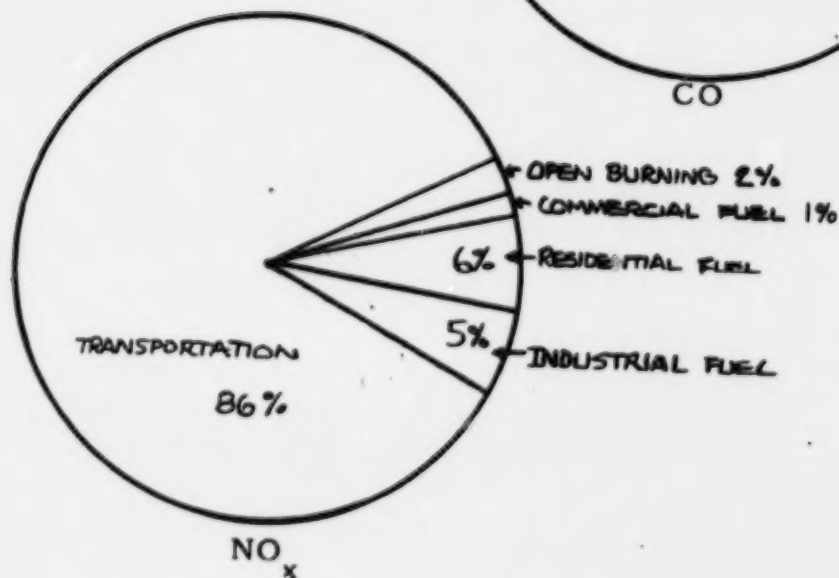
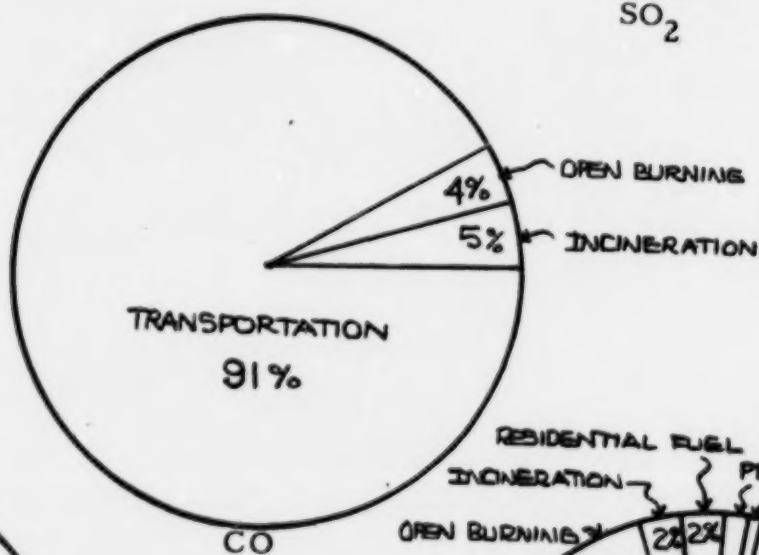
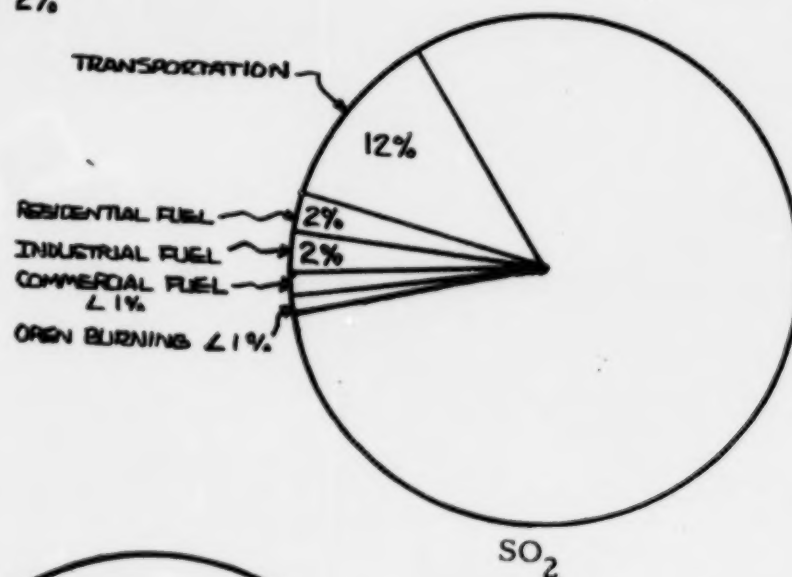
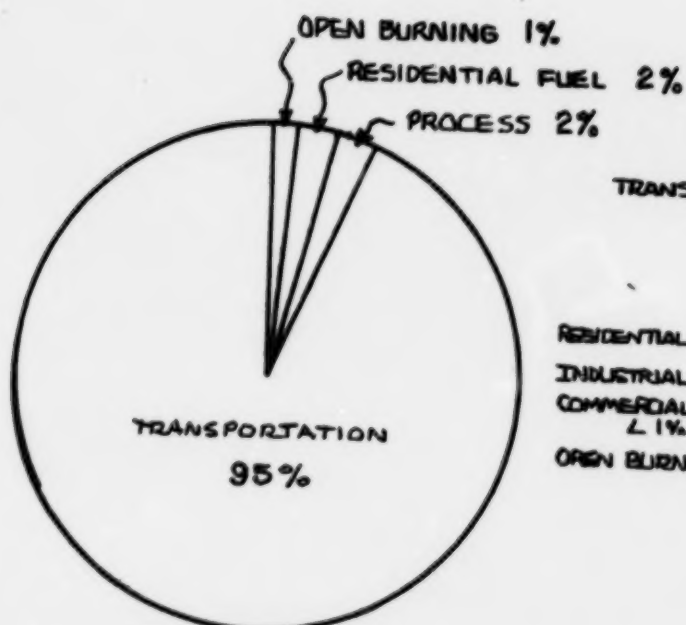
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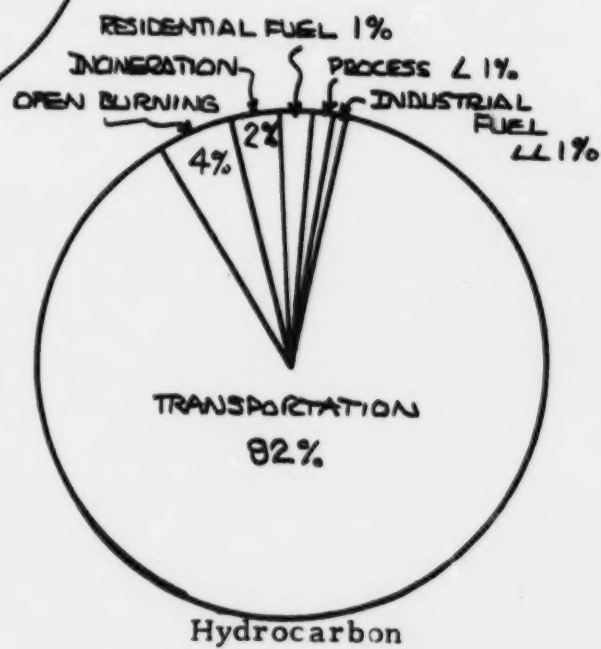
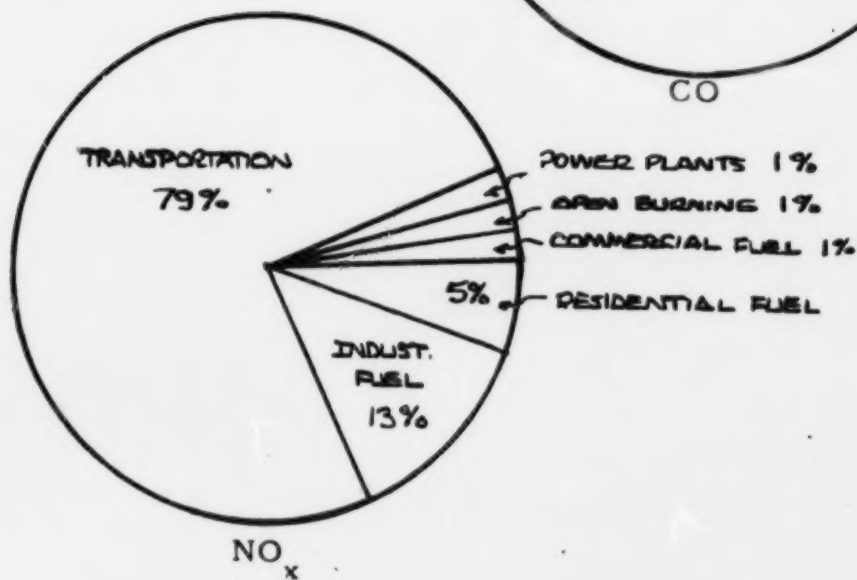
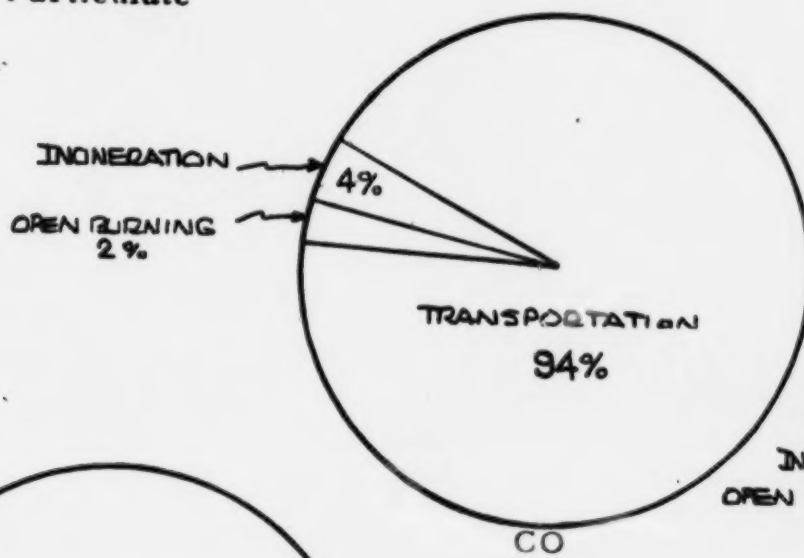
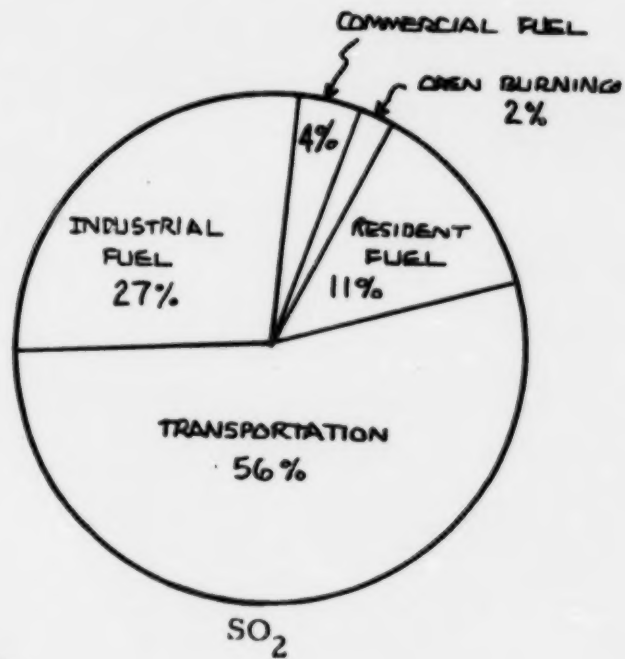
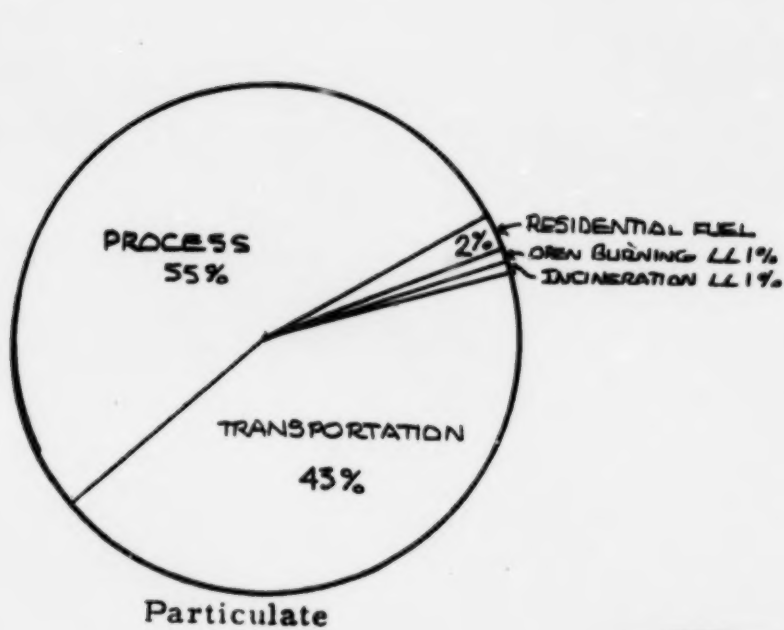
NO_x

OPEN BURNING 2%
POWER PLANTS 1%
RESIDENTIAL FUEL 1%
COMMERCIAL FUEL 221%
INDUSTRIAL FUEL 1%



Hydrocarbon





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APPENDIX "A" - FUEL PARAMETERS

For calculation of the area source emissions, fuel factors, as given below, were used. They were obtained by inspection of the point source returned questionnaires and from fuel characteristics supplied by State personnel.

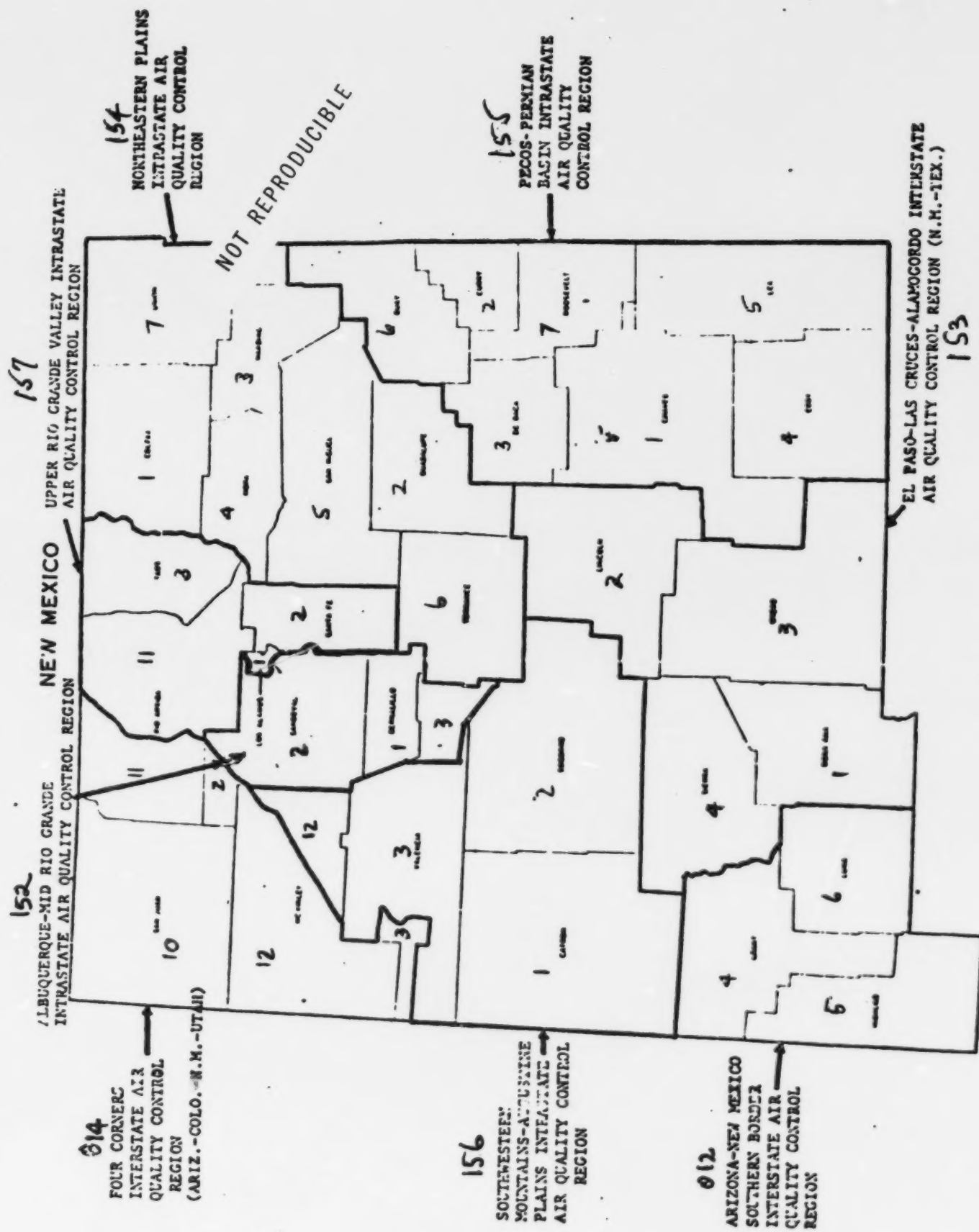
FUEL	ASH %	SULFUR %	HEAT CONTENT (BTU)
Sub-Bituminous Coal	21.8	0.7	18.0×10^6 /ton
Distillate Oil	----	0.5	140.0×10^3 /gal
Residual Oil	----	1.7	150.0×10^3 /gal
Natural Gas	----	---	1050/ft ³
Wood	¹ 0.7	0.0	8800/lb
LPG	----	---	325×10^3 gal

¹ Combustion Engineering, 1st Edition, 1948, Pp 12-2

APPENDIX "B"

MAP OF NEW MEXICO
AND
MAP OF BERNALILLO COUNTY GRID

FIGURE 1 - Outline map of New Mexico, showing Air Quality Control Regions and Counties



A

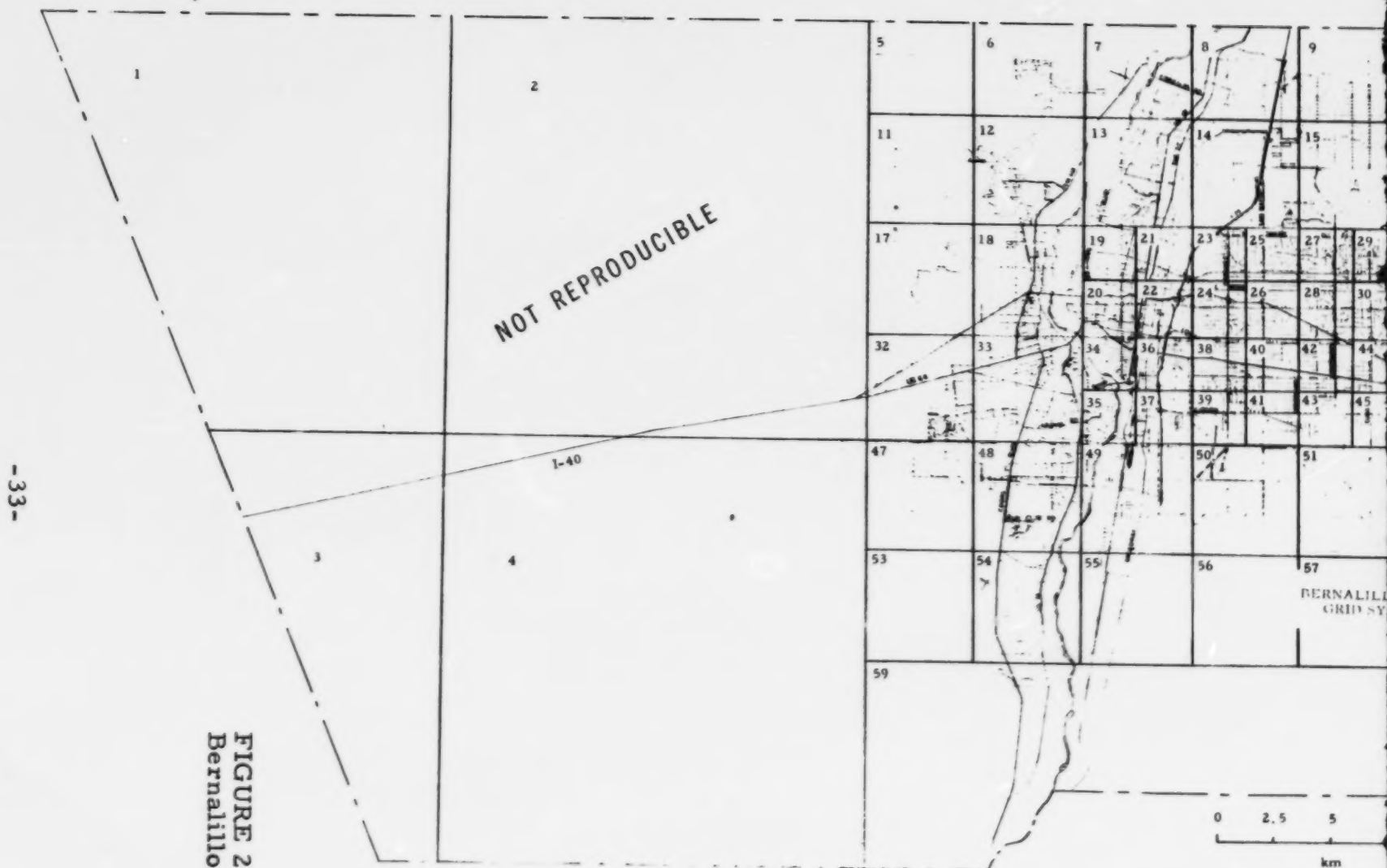
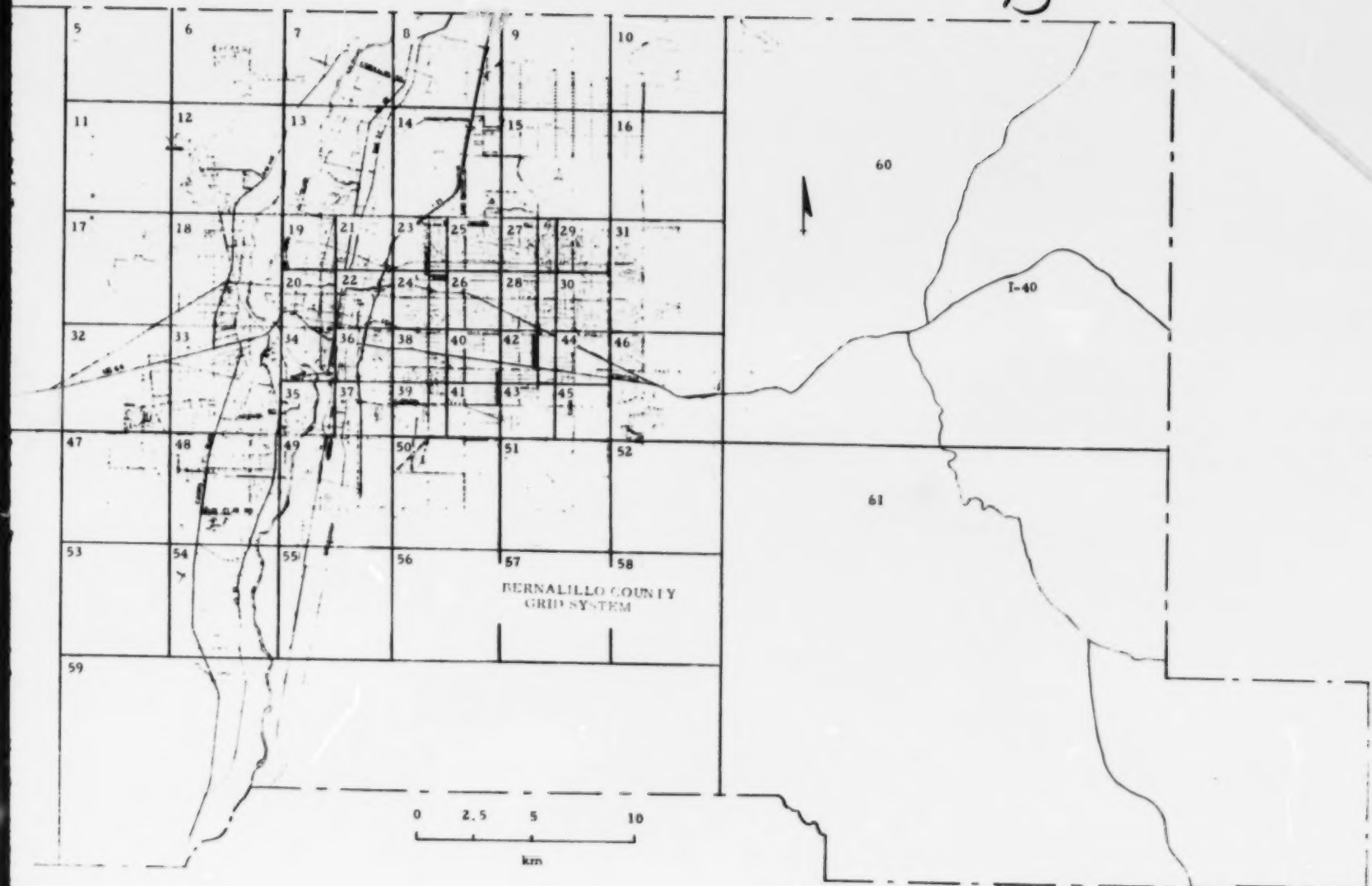


FIGURE 2 - Map of
Bernalillo County Grid

B



APPENDIX "C"

SUMMARY SHEETS:

1. General Inventory Totals
2. Hydrocarbon Emission Inventory Totals

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

AIR QUALITY CONTROL REGION 012

NEW MEXICO

DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	0	0	0	0	0	0	Tons
2. DISTILLATE OIL	10	14	5	3	11	1266	10 ³ gal
3. NATURAL GAS	11	0	12	5	43	1157	MMCF
4. WOOD	88	5	7	7	33	6470	Tons
5. LPG	27	0	0	62	185	8803	10 ³ gal
6. TOTAL	136	19	24	77	272		
B. COMM - INSTL & IND							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE- POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	24	68	0	4	85	3034	10 ³ gal
b. DISTILLATE OIL-POINT SOURCE	0	0	0	0	0	10	10 ³ gal
4. a. RESIDUAL OIL- AREA SOURCE	0	0	0	0	0	1	10 ³ gal
b. RESIDUAL OIL- POINT SOURCE	0	0	0	0	0	0	10 ³ gal
5. a. NATURAL GAS- AREA SOURCE	6	0	6	2	23	620	MMCF
b. NATURAL GAS- POINT SOURCE	60	2	2	137	5589	6923	MMCF
6. PROCESS GAS- POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD- AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD- POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	90	70	8	143	5706		
C. STEAM- ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ gal
5. NATURAL GAS	17	1	0	45	441	2259	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	17	1	0	45	441	2259	MMCF
D. TOTAL FUEL COMBUSTION	243	90	32	265	6419		
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
4519	24	900	0	0	0		
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE- AREA SOURCE	0	0	0	0	0	53	Tons
b. ON SITE- POINT SOURCE	0	0	0	0	0	0	Tons
2. MUNICIPAL ETC- POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE- AREA SOURCE	57	4	300	106	21	7070	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS- AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS- POINT SOURCE	0	0	10	3	0	236	Tons
C. OTHER	0	0	0	0	0	0	
2. OTHER	0	0	0	0	0	0	
D. TOTAL SOLID WASTE DISPOSAL	57	4	310	109	21		
IV. TRANSPORTATION-AREA SOURCE							
1. a. MOTOR VEHICLES- GASOLINE	149	91	34736	6329	4991	440715	10 ³ gal
b. MOTOR VEHICLES- DIESEL	56	100	724	145	757	4453	10 ³ gal
2. OFF- HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT	9	1	3	4	7		
D. RAILROAD	79	205	220	167	236	6296	10 ³ gal
E. VESSELS	0	0	0	0	0	0	
F. GASOLINE HANDLNG EVAP LOSSES	0	0	0	286	0	27236	10 ³ gal
G. UNPAVED ROADS	19142	0	0	0	0	41026	10 ³ gal
H. TOTAL TRANSPORTATION	19433	397	35743	6221	5991		
V. MISCELLANEOUS-AREA SOURCES							
A. AGRICULTURAL BURNING	4	0	17	0	0		
B. OTHER	0	0	0	0	0		
C. TOTAL MISCELLANEOUS	4	0	17	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	19456	488	36080	7157	6402		
B. POINT SOURCE	4519	24900	12	195	6923		
C. TOTAL	24254	25391	36102	7352	12431		

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

NEW MEXICO

AIR QUALITY CONTROL REGION

014

DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	57	30	66	16	7	2625	Tons
2. DISTILLATE OIL	12	17	6	4	14	2363	10 ³ Gal
3. NATURAL GAS	20	1	21	8	78	2096	MMCF
4. WOOD	690	38	50	50	252	50359	Tons
5. LPG	30	0	0	69	207	9846	10 ³ Gal
6. TOTAL	792	96	143	147	558		Tons
B. COMM. INSTL & IND.							
1. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
2. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
3. COKE-POINT SOURCE	0	0	0	0	0	0	Tons
4. DISTILLATE OIL-AREA SOURCE	50	145	1	10	200	6677	10 ³ Gal
5. DISTILLATE OIL-POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
6. RESIDUAL OIL-AREA SOURCE	0	0	0	0	0	2	10 ³ Gal
7. RESIDUAL OIL-POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
8. NATURAL GAS-AREA SOURCE	13	0	13	5	50	1339	MMCF
9. NATURAL GAS-POINT SOURCE	127	5	4	293	16029	14746	MMCF
10. PROCESS GAS-POINT SOURCE	0	0	0	0	0	0	MMCF
11. WOOD-AREA SOURCE	0	0	0	0	0	0	Tons
12. WOOD-POINT SOURCE	0	0	0	0	0	0	Tons
13. OTHER	0	0	0	0	0	0	
14. OTHER	0	0	0	0	0	0	
15. TOTAL	190	150	18	308	17178		Tons
C. STEAM-ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	36122	72515	2924	968	52097	6797500	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ Gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ Gal
5. NATURAL GAS	10	0	0	27	261	1339	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	36132	72515	2924	995	52349		Tons
8. TOTAL FUEL COMBUSTION	87181	72911	3055	1400	70094		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
1. AREA SOURCES	0	0	0	103	0		Tons
B. POINT SOURCES							
2. POINT SOURCES	922	60	0	9336	5		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. ON SITE-AREA SOURCE	1	0	1	0	0	189	Tons
2. ON SITE-POINT SOURCE	0	0	0	0	0	0	Tons
3. MUNICIPAL ETC.-POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. ON-SITE-AREA SOURCE	294	18	1561	551	110	36735	Tons
2. ON-SITE-POINT SOURCE	0	0	0	0	0		Tons
3. DUMPS-AREA SOURCE	0	0	0	0	0	0	Tons
4. DUMPS-POINT SOURCE	8	0	41	14	3	361	Tons
5. OTHER	0	0	0	0	0	0	
6. OTHER	0	0	0	0	0	0	
7. TOTAL SOLID WASTE DISPOSAL	303	18	1603	565	113	37896	Tons
IV. TRANSPORTATION-AREA SOURCE							
1. MOTOR VEHICLES-GASOLINE	231	140	55702	10022	7696	700606	10 ³ Gal
2. MOTOR VEHICLES-DIESEL	95	159	1139	829	1191	7008	10 ³ Gal
3. OFF-HIGHWAY FUEL USAGE	0	0	0	0	0	0	
4. AIRCRAFT	25	22	17	19	21		
5. RAILROAD	38	99	107	76	115	3059	10 ³ Gal
6. VESSELS	0	0	0	0	0	0	
7. GASOLINE HANDLNG ETC LOSSES	0	0	0	547	0	53995	10 ³ Gal
8. UNPAVED ROADS	26592	0	0	0	0	56266	10 ³ Gal
9. TOTAL TRANSPORTATION	26971	419	57065	10912	9013		Tons
V. MISCELLANEOUS-AREA SOURCES							
1. AGRICULTURAL BURNING	2	0	10	0	0		
2. OTHER	0	0	0	0	0		
3. TOTAL MISCELLANEOUS	2	0	10	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	29130	668	59724	11729	9931		Tons
B. POINT SOURCE	57049	72640	2939	9538	69284		Tons
C. TOTAL	125219	73308	61733	21256	79215		Tons

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

NEW MEXICO

AIR QUALITY CONTROL REGION

152

DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	26	14	30	7	3	1192	Tons
2. DISTILLATE OIL	33	47	16	10	39	6504	10 ³ Gal
3. NATURAL GAS	120	4	137	55	52	12655	MMCF
4. WOOD	300	17	22	22	11	22246	Tons
5. LPG	33	0	1	78	234	11142	10 ³ Gal
6. TOTAL	522	82	206	172	899		Tons
B. COMM - INSTL & IND							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE- POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	199	569	3	39	799	26300	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	0	0	0	0	0	9	10 ³ Gal
4. a. RESIDUAL OIL-AREA SOURCE	0	1	0	0	0	8	10 ³ Gal
b. RESIDUAL OIL-POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
5. a. NATURAL GAS-AREA SOURCE	50	2	53	21	198	5270	MMCF
b. NATURAL GAS-POINT SOURCE	40	1	26	45	248	4324	MMCF
6. PROCESS GAS-POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD-AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD-POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	299	572	92	105	1235		Tons
C. STEAM-ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ Gal
4. RESIDUAL OIL	14	225	0	9	186	3536	10 ³ Gal
5. NATURAL GAS	116	4	3	311	3030	15537	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	130	229	3	320	3216		Tons
D. TOTAL FUEL COMBUSTION	240	983	291	597	5350		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
3474	0	0	0	0	0		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE- AREA SOURCE	1	0	1	0	0	268	Tons
b. ON SITE- POINT SOURCE	93	1	1725	147	14	26548	Tons
2. MUNICIPAL, ETC.- POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE- AREA SOURCE	450	29	2320	943	169	56233	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS- AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS- POINT SOURCE	23	1	119	41	9	2902	Tons
C. OTHER	0	0	0	0	0	0	
2. OTHER	0	0	0	0	0	0	
557	30	4235	1031	192	85858		Tons
IV. TRANSPORTATION-AREA SOURCE							
1. a. MOTOR VEHICLES- GASOLINE	611	370	16457	23493	19426	1951353	10 ³ Gal
2. MOTOR VEHICLES- DIESEL	229	406	2930	596	3065	18031	10 ³ Gal
3. OFF-HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT	641	208	1752	773	387		
D. RAILROAD	39	101	109	78	117	3111	10 ³ Gal
E. VESSELS	0	0	0	0	0	0	
F. GASOLINE HANDLNG EVAP LOSSES	0	0	0	1508	0	150271	10 ³ Gal
G. UNPAVED ROADS	29297	0	0	0	0	60604	10 ³ Gal
H. TOTAL TRANSPORTATION	29907	1085	171249	32629	23065		Tons
V. MISCELLANEOUS-AREA SOURCES							
A. AGRICULTURAL BURNING	1	0	5	0	0		
B. OTHER	0	0	0	0	0		
C. TOTAL MISCELLANEOUS	1	0	5	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	31025	1766	79906	34106	75120		Tons
B. POINT SOURCE	3761	232	1913	593	3497		Tons
C. TOTAL	34786	1998	181779	34659	286071		Tons

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

NEW MEXICO

AIR QUALITY CONTROL REGION

153

DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	1	0	1	0	0	38	Tons
2. DISTILLATE OIL	25	36	12	7	30	4982	10 ³ Gal
3. NATURAL GAS	29	1	30	12	114	3045	MMCF
4. WOOD	182	10	13	13	67	13464	Tons
5. LPG	120	1	2	231	843	40156	10 ³ Gal
6. TOTAL	357	48	58	313	1054		Tons
B. COMM. INSTL & IND.							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE-POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	77	220	1	15	306	10178	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	1	0	0	0	5	173	10 ³ Gal
4. a. RESIDUAL OIL-AREA SOURCE	0	0	0	0	0	3	10 ³ Gal
b. RESIDUAL OIL-POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
5. a. NATURAL GAS-AREA SOURCE	19	1	20	8	76	2039	MMCF
b. NATURAL GAS-POINT SOURCE	0	0	0	0	0	0	MMCF
6. PROCESS GAS-POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD-AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD-POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	97	221	21	23	387		Tons
C. STEAM-ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ Gal
4. RESIDUAL OIL	0	7	0	0	3	54	10 ³ Gal
5. NATURAL GAS	49	2	1	132	1293	6582	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	49	9	1	132	1296	6636	Tons
D. TOTAL FUEL COMBUSTION	503	278	80	468	2727		Tons
II. PROCESS LOSSES							
A. AREA SOURCES	0	0	0	156	0		Tons
B. POINT SOURCES	61	0	0	0	0		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON-SITE-AREA SOURCE	1	0	1	0	0	167	Tons
b. ON-SITE-POINT SOURCE	310	5	5720	496	46	88000	Tons
2. MUNICIPAL, ETC.-POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE-AREA SOURCE	107	7	570	201	40	13401	Tons
b. ON-SITE-POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS-AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS-POINT SOURCE	36	2	197	68	13	4599	Tons
C. OTHER	0	0	0	0	0	0	
D. OTHER	0	0	0	0	0	0	
D. TOTAL SOLID WASTE DISPOSAL	454	14	6488	755	99	106167	Tons
IV. TRANSPORTATION-AREA SOURCE							
A. 1. MOTOR VEHICLES-GASOLINE	317	192	77967	13204	10455	559220	10 ³ Gal
2. MOTOR VEHICLES-DIESEL	118	212	1530	306	1601	9417	10 ³ Gal
B. OFF-HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT	77	18	179	169	38		
D. RAILROAD	117	305	328	234	352	9378	10 ³ Gal
E. VESSELS	0	0	0	0	0	0	
F. GASOLINE HANDLING LOSSES	0	0	0	714	0	67994	10 ³ Gal
G. UNPAVED ROADS	27639	0	0	0	0	59344	10 ³ Gal
H. TOTAL TRANSPORTATION	28329	727	79304	15326	12446		Tons
V. MISCELLANEOUS-AREA SOURCES							
A. AGRICULTURAL BURNING	5	0	19	0	0		
B. OTHER	0	0	0	0	0		
C. TOTAL MISCELLANEOUS	5	0	19	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	28894	1003	80573	16019	13922		Tons
B. POINT SOURCE	457	16	5918	686	1350		Tons
C. TOTAL	29351	1019	86491	16705	15272		Tons

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

NEW MEXICO

AIR QUALITY CONTROL REGION

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DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	97	51	111	27	11	4446	Tons
2. DISTILLATE OIL	22	32	11	7	26	4387	10 ³ Gal
3. NATURAL GAS	4	0	4	2	16	431	MMCF
4. WOOD	456	25	34	34	169	33804	Tons
5. LPG	37	0	1	86	257	12222	10 ³ Gal
6. TOTAL	616	108	161	156	479		Tons
B. COMM - INSTL & IND							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	3	3	0	0	3	0	Tons
2. COKE- POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	38	107	0	8	142	4267	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	0	0	0	0	0	7	10 ³ Gal
4. a. RESIDUAL OIL- AREA SOURCE	0	0	0	0	0	2	10 ³ Gal
b. RESIDUAL OIL- POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
5. a. NATURAL GAS- AREA SOURCE	2	0	10	4	37	995	MMCF
b. NATURAL GAS- POINT SOURCE	45	1	47	19	176	4700	MMCF
6. PROCESS GAS- POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD- AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD- POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	101	111	57	31	365		Tons
C. STEAM- ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	3802	274	11	3	197	21240	Tons
3. DISTILLATE OIL	1	0	0	0	6	191	10 ³ Gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ Gal
5. NATURAL GAS	2	0	0	6	57	222	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	3812	274	11	9	260		Tons
D. TOTAL FUEL COMBUSTION	4528	493	229	196	1104		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
297	0	0	0	0	0		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE- AREA SOURCE	0	0	0	0	0	1	Tons
b. ON SITE- POINT SOURCE	141	2	2626	232	20	40400	Tons
2. MUNICIPAL, ETC.- POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE- AREA SOURCE	100	6	531	108	39	12501	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS- AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS- POINT SOURCE	44	1	236	83	16	5539	Tons
C. OTHER	0	0	0	0	0	0	
3. OTHER	0	0	0	0	0	0	
295	9	3393	433	74	59441		Tons
IV. TRANSPORTATION- AREA SOURCE							
1. a. MOTOR VEHICLES- GASOLINE	254	154	56927	10514	9644	770515	10 ³ Gal
2. MOTOR VEHICLES- DIESEL	24	169	1222	244	1278	7519	10 ³ Gal
B. OFF- HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT	0	0	0	0	0	0	
D. RAILROAD	16	42	45	32	42	1228	10 ³ Gal
E. VESSELS	0	0	0	0	0	0	
F. GASOLINE HANDLING LOSSES	0	0	0	425	0	46187	10 ³ Gal
G. UNPAVED ROADS	23943	0	0	0	0	51093	10 ³ Gal
H. TOTAL TRANSPORTATION	24207	365	58094	11275	9971		Tons
V. MISCELLANEOUS- AREA SOURCES							
A. AGRICULTURAL BURNING	1	0	7	0	0		
B. OTHER	0	0	0	0	0	0	
C. TOTAL MISCELLANEOUS	1	0	7	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	24971	536	58803	11707	10674		Tons
B. POINT SOURCE	4339	291	2920	333	475		Tons
C. TOTAL	29309	827	61723	12040	11149		Tons

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

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DATA REPRESENTATIVE OF CALENDAR YEAR

1970

SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	4	2	4	1	0	170	Tons
2. DISTILLATE OIL	10	14	5	3	12	1252	10 ³ Gal
3. NATURAL GAS	78	2	82	33	308	9205	MMCF
4. WOOD	39	8	3	3	14	2962	Tons
5. LPG	117	1	2	273	818	38247	10 ³ Gal
6. TOTAL	249	21	96	313	1152		Tons
B. COMM - INSTL & IND							
1a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE- POINT SOURCE	0	0	0	0	0	0	Tons
3. 4. DISTILLATE OIL-AREA SOURCE	138	398	1	28	552	18402	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	0	0	0	0	0	2	10 ³ Gal
4. a. RESIDUAL OIL- AREA SOURCE	0	0	0	0	0	6	10 ³ Gal
b. RESIDUAL OIL- POINT SOURCE	0	0	0	0	0	0	10 ³ Gal
5. a. NATURAL GAS- AREA SOURCE	35	1	37	15	138	3627	MMCF
b. NATURAL GAS- POINT SOURCE	341	12	10	813	14513	50039	MMCF
6. PROCESS GAS- POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD- AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD- POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER NATURAL GAS	285	747	40000	4843	1424	0	MMCF
b. OTHER	0	0	0	0	0	0	
9. TOTAL	799	1179	40048	6012	16627		Tons
C. STEAM- ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	2	0	0	0	9	300	10 ³ Gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ Gal
5. NATURAL GAS	153	6	3	407	3975	20382	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	155	6	3	407	3984		Tons
D. TOTAL FUEL COMBUSTION	1202	1195	40147	6419	71763		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
19714	21396	1979	4006	723			Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE- AREA SOURCE	0	0	0	0	0	5	Tons
b. ON SITE- POINT SOURCE	11	0	195	17	2	3256	Tons
2. MUNICIPAL, ETC.- POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE- AREA SOURCE	217	14	1153	407	81	27123	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS- AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS- POINT SOURCE	172	9	901	37	62	21176	Tons
C. OTHER	0	0	0	0	0	0	
2. OTHER	0	0	0	0	0	0	
D. TOTAL SOLID WASTE DISPOSAL	400	23	2249	741	145		Tons
IV. TRANSPORTATION- AREA SOURCE							
A. 1. MOTOR VEHICLES- GASOLINE							
2. MOTOR VEHICLES- DIESEL	480	290	120348	21402	16704	1452700	10 ³ Gal
B. OFF-HIGHWAY FUEL USAGE	192	327	2361	472	2470	14527	10 ³ Gal
C. AIRCRAFT	0	0	0	0	0	0	
D. RAILROAD	133	88	591	226	83		
E. VESSELS	180	467	503	360	539	14384	10 ³ Gal
F. GASOLINE HNDLS EVAP LOSSES	0	0	0	0	0	0	
G. UNPAVED ROADS	49628	0	0	1202	0	114466	10 ³ Gal
H. TOTAL TRANSPORTATION	50503	1172	12440	23652	19786		Tons
V. MISCELLANEOUS- AREA SOURCES							
A. AGRICULTURAL BURNING							
B. OTHER	10	0	37	1	1		
C. TOTAL MISCELLANEOUS	0	0	0	0	0	0	
10	0	37	1	1			
VI. GRAND TOTAL							
A. AREA SOURCE							
B. POINT SOURCE	5075	1606	125727	24708	21720		Tons
C. TOTAL	20678	29170	43088	10403	70708		Tons
70823	29776	169816	25101	92458			Tons

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SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	14	7	16	4	2	641	Tons
2. DISTILLATE OIL	15	22	8	5	18	3010	10 ³ Gal
3. NATURAL GAS	8	0	8	3	30	808	MMCF
4. WOOD	427	24	32	32	158	31529	Tons
5. LPG	33	0	1	77	230	10974	10 ³ Gal
6. TOTAL	457	53	65	121	438		Tons
B. COMM. INSTR. & IND.							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE-POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	28	79	0	5	110	3664	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	0	0	0	0	2	50	10 ³ Gal
4. a. RESIDUAL OIL-AREA SOURCE	0	0	0	0	0	1	10 ³ Gal
b. RESIDUAL OIL-POINT SOURCE	0	1	0	0	0	5	10 ³ Gal
5. a. NATURAL GAS-AREA SOURCE	7	0	7	3	28	734	MMCF
b. NATURAL GAS-POINT SOURCE	9	0	1	20	262	1041	MMCF
6. PROCESS GAS-POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD-AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD-POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	44	80	8	28	402		Tons
C. STEAM-ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ Gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ Gal
5. NATURAL GAS	0	0	0	0	0	0	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	0	0	0	0	0	0	Tons
D. TOTAL FUEL COMBUSTION	541	133	73	149	840		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
439	2900	0	0	0	0		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE-AREA SOURCE	0	0	0	0	0	90	Tons
b. ON SITE-POINT SOURCE	95	1	1757	149	15	27030	Tons
2. MUNICIPAL, ETC.-POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE-AREA SOURCE	245	15	1301	459	92	30617	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS-AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS-POINT SOURCE	57	4	302	106	21	7093	Tons
C. OTHER							
2. OTHER	0	0	0	0	0	0	
397	20	3360	714	128	64830		Tons
IV. TRANSPORTATION-AREA SOURCE							
1. a. MOTOR VEHICLES-GASOLINE	152	92	35295	6426	5086	459900	10 ³ Veh-mi
b. MOTOR VEHICLES-DIESEL	69	125	202	180	243	55498	10 ³ Gal
2. OFF-HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT							
D. RAILROAD							
72	196	201	143	215	5731	10 ³ Gal	
E. VESSELS							
F. GASOLINE HANDLNG EVAP LOSSES							
0	0	0	330	0	31426	10 ³ Gal	
G. UNPAVED ROADS							
34063	0	0	0	0	72779	10 ³ Veh-mi	
34356	403	36398	7079	6244			Tons
V. MISCELLANEOUS-AREA SOURCES							
A. AGRICULTURAL BURNING							
B. OTHER							
1	0	4	0	0	0		
C. TOTAL MISCELLANEOUS							
1	0	4	0	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE							
35134	550	37765	7723	6912			Tons
B. POINT SOURCE							
600	2806	2060	215	300			Tons
35734	3356	39825	7938	7212			Tons

~ EMISSIONS INVENTORY SUMMARY ~

FOR THE STATE OF

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SOURCE CATEGORY	TONS OF POLLUTANT / YEAR					FUEL ETC.	
	PART	SO ₂	CO	HC	NO _x	QUANTITY	UNITS
I. FUEL COMBUSTION							
A. RESIDENTIAL FUEL-AREA SOURCE							
1. (ANTHRACITE) COAL	40	21	46	11	5	1857	Tons
2. DISTILLATE OIL	10	14	5	3	12	1936	10 ³ Gal
3. NATURAL GAS	20	1	21	8	80	2121	MMCF
4. WOOD	808	45	60	60	239	59896	Tons
5. LPG	35	0	1	81	242	11507	10 ³ Gal
6. TOTAL	913	81	133	163	638		Tons
B. COMM - INSTL & IND							
1. a. (BITUMINOUS) COAL-AREA SOURCE	0	0	0	0	0	0	Tons
b. (BITUMINOUS) COAL-POINT SOURCE	0	0	0	0	0	0	Tons
2. COKE- POINT SOURCE	0	0	0	0	0	0	Tons
3. a. DISTILLATE OIL-AREA SOURCE	60	172	1	12	239	6502	10 ³ Gal
b. DISTILLATE OIL-POINT SOURCE	2	0	0	0	6	200	10 ³ Gal
4. a. RESIDUAL OIL- AREA SOURCE	0	0	0	0	0	3	10 ³ Gal
b. RESIDUAL OIL- POINT SOURCE	4	68	0	1	11	370	10 ³ Gal
5. a. NATURAL GAS- AREA SOURCE	15	0	16	6	60	1599	MMCF
b. NATURAL GAS- POINT SOURCE	12	0	4	24	1194	1530	MMCF
6. PROCESS GAS- POINT SOURCE	0	0	0	0	0	0	MMCF
7. a. WOOD- AREA SOURCE	0	0	0	0	0	0	Tons
b. WOOD- POINT SOURCE	0	0	0	0	0	0	Tons
8. a. OTHER	0	0	0	0	0	0	
b. OTHER	0	0	0	0	0	0	
9. TOTAL	93	240	21	43	1510		Tons
C. STEAM- ELECTRIC POWER PLANT							
1. ANTHRACITE COAL	0	0	0	0	0	0	Tons
2. BITUMINOUS COAL	0	0	0	0	0	0	Tons
3. DISTILLATE OIL	0	0	0	0	0	0	10 ³ Gal
4. RESIDUAL OIL	0	0	0	0	0	0	10 ³ Gal
5. NATURAL GAS	29	1	30	12	115	3019	MMCF
6. OTHER	0	0	0	0	0	0	
7. TOTAL	29	1	30	12	115		Tons
D. TOTAL FUEL COMBUSTION	1035	322	184	219	2263		Tons
II. PROCESS LOSSES							
A. AREA SOURCES							
B. POINT SOURCES							
25419	0	0	0	0	0		Tons
III. SOLID WASTE DISPOSAL							
A. INCINERATION							
1. a. ON SITE- AREA SOURCE	0	0	1	0	0	110	Tons
b. ON SITE- POINT SOURCE	-162	2	2997	254	23	46100	Tons
2. MUNICIPAL ETC- POINT SOURCE	0	0	0	0	0	0	Tons
B. OPEN BURNING							
1. a. ON-SITE- AREA SOURCE	222	14	1177	416	93	27700	Tons
b. ON-SITE POINT SOURCE	0	0	0	0	0	0	Tons
2. a. DUMPS- AREA SOURCE	0	0	0	0	0	0	Tons
b. DUMPS- POINT SOURCE	24	1	129	45	10	3048	Tons
C. OTHER	0	0	0	0	0	0	
2. OTHER	0	0	0	0	0	0	
408	17	4304	715	116	76267		Tons
IV. TRANSPORTATION- AREA SOURCE							
A. 1. MOTOR VEHICLES- GASOLINE	225	136	55687	5826	7432	62935	10 ³ Veh-mi
2. MOTOR VEHICLES- DIESEL	36	154	1115	223	1167	6962	10 ³ Gal
B. OFF-HIGHWAY FUEL USAGE	0	0	0	0	0	0	
C. AIRCRAFT	23	45	272	39	21		
D. RAILROAD	26	69	74	53	79	2112	10 ³ Gal
E. VESSELS	0	0	0	0	0	0	
F. GASOLINE HANDLG EMD LOSSES	0	0	0	476	0	45329	10 ³ Gal
G. UNPAVED ROADS	24140	0	0	0	0	51719	10 ³ Veh-mi
24305	404	57148	10717	8699			Tons
V. MISCELLANEOUS- AREA SOURCES							
A. AGRICULTURAL BURNING	5	0	16	0	0		
B. OTHER	0	0	0	0	0	0	
5	0	16	0	0	0		
VI. GRAND TOTAL							
A. AREA SOURCE	25720	671	59492	11427	9719		Tons
B. POINT SOURCE	25652	72	3160	336	1359		Tons
51372	743	61652	11763	11078			Tons

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Hydrocarbon Emission Inventory

AQCR 012

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			6329	
Other Transp.			306	
Fuel Combustion			265	
Solid Waste Disposal			109	
Dry Cleaning				
1. Perchloroethylene	Perchloroethylene			19
2. Stoddard	Stoddard		28	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			286	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning			0	
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	7342		7323	19

Hydrocarbon Emission Inventory

AQCR 014

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			10022	
Other Transp.			323	
Fuel Combustion			1350	
Solid Waste Disposal			565	
Dry Cleaning				
1. Perchloroethylene	Perchloroethylene			42
2. Stoddard	Stoddard		61	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			567	
2.				
Industrial Process				
1. Petroleum Refinery			8336	
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning			0	
Totals	Total Hydrocarbons 21266	Reactive	21224	Non-Reactive 42

Hydrocarbon Emission Inventory

AQCR 152

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			28 683	
Other Transp.			2437	
Fuel Combustion			597	
Solid Waste Disposal			1031	
Dry Cleaning				
1. Perchloroethylene	Perchloroethylene			165
2. Stoddard	Stoddard		238	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			1508	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning				
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	34 659	34 494		165

Hydrocarbon Emission Inventory

AQCR 153

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			13 904	
Other Transp.			708	
Fuel Combustion			468	
Solid Waste Disposal			755	
Dry Cleaning				
1. Perchloro-ethylene	Perchloro-ethylene			64
2. Stoddard	Stoddard		92	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			714	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning				
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	16705		16 641	64

Hydrocarbon Emission Inventory

AQCR 154

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			10 514	
Other Transp.			276	
Fuel Combustion			196	
Solid Waste Disposal			493	
Dry Cleaning				
1. Perchloro-ethylene	Perchloro-ethylene			31
2. Stoddard	Stoddard		45	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			485	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning				
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	12 040		12 009	31

Hydrocarbon Emission Inventory

AQCR 155

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			21402	
Other Transp.			856	
Fuel Combustion			6419	
Solid Waste Disposal			741	
Dry Cleaning				
1. Perchloro-ethylene	Perchloro-ethylene			116
2. Stoddard	Stoddard		166	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			1202	
2.				
Industrial Process				
1. Petroleum Refinery			4006	
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning			1	
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	34 909		34 793	116

Hydrocarbon Emission Inventory

AQCR 156

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			6426	
Other Transp.			323	
Fuel Combustion			149	
Solid Waste Disposal			714	
Dry Cleaning				
1. Perchloro-ethylene	Perchloro-ethylene			23
2. Stoddard	Stoddard		33	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			330	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning				
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	7998	7975		23

Hydrocarbon Emission Inventory

AQCR 157

Source Category	Name of solvent or hydrocarbon emitted	Quantity Emitted (Tons/Yr.)		
		Reactive		Non-Reactive
		Controlled	Uncontrolled	
Automotive			9926	
Other Transp.			315	
Fuel Combustion			219	
Solid Waste Disposal			715	
Dry Cleaning				
1. Perchloro-ethylene	Perchloro-ethylene			46
2. Stoddard	Stoddard		67	
Architectural Surface Coatings				
Tank Loss				
1. Gasoline Marketing			476	
2.				
Industrial Process				
1. Petroleum Refinery				
2. Solvent Operations				
3. Industrial Coatings				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Other (Please Specify)				
Agricultural Burning				
Totals	Total Hydrocarbons	Reactive		Non-Reactive
	11763	11717		46

APPENDIX "D"

PRINT-OUT IDENTIFICATIONS

While the main body of the computer area source print-outs is standardized, there are some sections under the heading of "Other" that need further identification.

The following table presents a guide to the location of the enumerated items.

<u>LOCATION</u>	<u>SOURCE</u>
Table 3 Col. 1	Agricultural burning
Table 3 Col. 2	Unpaved roads
Table 3 Col. 3	Aircraft
Table 3 Col. 4	Gasoline handling
Table 5 Line 15	Total dry cleaning
Table 5 Line 19	LPG
Table 5 Line 22	Reactive dry cleaning